

Since 1994

STEELWORLD™

Devoted to Iron & Steel Industry

Vol. 28 No. 8

August 2022

Registered-RNI No. 62719/94

www.steelworld.com

Improved Safety Via Accident Prevention Module:

- Lining Thickness & Health Detection System
- Online Bottom Earth leakage Detection System (ON-BELD)

 **megatherm**



GREEN FURNACE



Indian automotive sector to enhance the demand for Micro-alloyed Steel application in EVs

Alok Vashishth
Head – Sales & Marketing
Kalyani Steel

■ **EMG iTiM high-precision thickness measurement solution for metallic flat products**

■ **Steel decarbonising expects a US\$1.4 trillion investment by 2050 – Wood Mackenzie**

■ **India is gearing up for Advanced Mobility**

■ **India set the roadmap to reduce carbon emissions by one million tons by 2030**



INDUSTRY LEADER IN COMBUSTION SYSTEMS

TECHNOLOGY TIE-UPS WITH GLOBAL PARTNERS

UNBEATABLE FIREPOWER FROM

 **WESMAN**

combustion@wesman.com ■ www.wesman.com



CASE GROUP

....A COMPLETE RANGE OF COAL GASIFIERS



HOT GASIFIERS

- GASIFIES LUMP COAL (15-60mm)
- GAS EXIT TEMPERATURE > 450°C
- ZERO LIQUID DISCHARGE (ZLD) TECHNOLOGY
- CAPACITIES FROM 1000-12000NM³/HR GAS FLOWS IN SINGLE CELL
- GAS THERMAL HEAT VALUES >1800KCAL/NM³
- SUITABLE FOR ROLLING MILLS, STRIP MILLS, REFRACTORY ETC.

COLD PYROLYSIS GASIFIERS

- GASIFIES LUMP COAL (15-60mm)
- GAS EXIT TEMPERATURES <45°C
- ZERO LIQUID DISCHARGE (ZLD) TECHNOLOGY
- CAPACITIES FROM 1000-12000NM³/HR GAS FLOWS IN SINGLE CELL
- BURNER LEVEL AUTOMATION POSSIBLE
- HIGHER % OF C_nH_m RESULTING IN GAS CV >1400KCAL/NM³
- SUITABLE FOR AUTOMATIC ROLLING MILLS, GLASS PLANTS, PELLET PLANTS, ALUMINIUM PLANTS ETC.



CFBC GASIFIERS

- GASIFIES COAL FINES (< 10mm)
- GAS EXIT TEMPERATURES <45°C
- ZERO LIQUID DISCHARGE (ZLD) TECHNOLOGY
- GAS THERMAL HEAT VALUES >1300KCAL/NM³
- CAPACITIES FROM 10000-60000NM³/HR GAS FLOWS IN SINGLE CELL
- SUITABLE FOR ALUMINA PLANTS, PELLET PLANTS, INTEGRATED STEEL PLANTS ETC.



ENTRAINED FLOW GASIFIERS

- GASIFIES COAL FINES (< 100 MICRONS)
- 99.99% OXYGEN USED AS GASIFYING AGENT
- ZERO LIQUID DISCHARGE (ZLD) TECHNOLOGY
- CAPACITIES FROM 10000-80000NM³/HR GAS FLOWS IN SINGLE CELL
- FINAL GAS CALORIFIC VALUE CAN REACH UP TO 2500KCAL/NM³
- HIGH ASH INDIAN COAL FINES CAN BE GASIFIED.



EDITOR

D. A. Chandekar
B.E. (Met.) DBM, DJMC

PRODUCTION

Anita Chandekar

DESIGN & LAYOUT

Ace Graphics

MARKETING

Mrinal Nath

CIRCULATION

Prachee More

Administrative Office

1, Alpha, M. G. Road, Vile Parle (E),
Mumbai - 400 057, India

Tel. : 91-22-2619 2376,
2617 1575 / 2617 1866

Email :

Marketing : info@steelworld.com
Editorial : editorial@steelworld.com
Website : www.steelworld.com

 facebook.com/pages/Steelworld/
621590691216613

 steelworldblog.wordpress.com

 twitter.com/ChandekarSteel

 linkedin.com/company/13423799/

 youtube.com/channel/
UCJLJDOXYZTm12RuhR09wjuw

Editorial Desk



D. A. Chandekar
Editor

Dear Readers,

'One can not imagine any industry without the use of metals. Metallurgy is the mother of all industries' or 'Industrial progress of any country can be measured in terms of steel produced in that country'. We used to hear such inspiring remarks from our professors in engineering college and used to feel extremely proud of our branch. We (students of metallurgy branch) were almost sure of our very important role in the process of nation building in coming years. Now more than 35 years after passing out, I see a totally different picture. Most of the metallurgy students from prestigious colleges either leave metallurgy to join the bullet train of IT or they leave the country for some research work. As such the number of metallurgical engineers passing out every year is very small compared to other branches like civil, mechanical, electrical etc. After the inclusion of modern streams like Electronics, IT, Computer Science, Telecom etc. the proportion has further reduced. Many years ago, Ministry of Steel had done one survey to assess the situation in metallurgical career. The results were astonishing. It was revealed that around 70 % of metallurgists leave metallurgy immediately after passing out. 'Most of my students go abroad. Who will be interested in thin

packages they are offered in India ? As such Indian plants don't need engineers. They are run by diploma holders only.' These were the words of HOD, Metallurgy of a A+ category institute in the country.

For many years, metallurgy branch and the career ahead was seen as dirty road, full of shop floor dust and ultra high temperatures. A young engineering graduate would dream of an AC office and a cozy environment to work in, surely not a 'pitside' or a 'meltshop' in a steel plant. Secondly, the salaries in the metallurgical line were really peanuts compared to those in other industries such as auto, IT, Telecom etc. I do agree that with the emergence of modern processes and adoption of automation and smart manufacturing technologies, metallurgical engineers also got promoted from an iron cabin besides the furnace or a rolling mill, to a central control room, fully air-conditioned and having big screens all over to monitor and regulate the operations. Salary structure also improved a lot but still lot of ground remains to be covered. Unless we match IT (and similar) sector salaries, the exodus of metallurgists will continue !

As we all know, Ministry of Steel has set an ambitious target of reaching to 300 MTPA steel making capacity by 2030-31. Apart from many other things, this will require huge technically qualified manpower. What can we, as industry, do to achieve this ? One, increase the seats for metallurgy branch in engineering colleges. Two, revise the salary structure to retain metallurgists. Three, start short orientation courses which can acclimatise any engineering graduate into Metallurgical domain. 'A stitch in time saves nine'. If we don't act today, tomorrow it may be too late !

Write your comments :

<https://steelworldblog.wordpress.com/>

Content

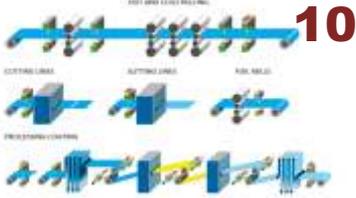
Face to Face



6 Indian automotive sector to enhance the demand for Micro-alloyed Steel application in EVs

Alok Vashishth
Head – Sales & Marketing
Kalyani Steel

Analysis



10 EMG iTiM high-precision thickness measurement solution for metallic flat products

Industry Update



14 ExxonMobil showcases innovation in new-age fluid and digital reliability solutions at MMMM 2022



16 Steel decarbonising expects a US\$1.4 trillion investment by 2050 – Wood Mackenzie

Technology



20 India is gearing up for Advanced Mobility



28 India set the roadmap to reduce carbon emissions by one million tons by 2030

News Update

32 India to become world's number one producer of steel: Jyotiraditya Scindia

Steel Minister Jyotiraditya Scindia call for Made in India' steel, as self-reliance in its production

News Update

32 15% export duty on steel to stay till December

34 US Steel makers warn on demand trends

MENA can lead the world in green steel production – Report

36 US to prioritize low-carbon green construction materials, including steel

37 Steel PLI scheme: Government gets 75 applications from domestic players

JSW Steel signs an MoU with SMS to cut carbon emissions; invest Rs.10,000 crore

Tata Steel sees high growth in new material business, to set up new arm

38 Nippon Steel plans to almost double Indian unit's output capacity

China's property sector support buoys iron ore prices

39 RINL calls bids for operating its forged wheel plant in UP

TERI signs MoU with Tata Steel Foundation to implement Green Steel Project

40 National CSR Award for JSPL in Two Categories

41 JSW Steel to support Odisha's Kalinganagar Park

Why metal giants, ArcelorMittal are shutting factories amid Europe energy crisis

ArcelorMittal expects its Europe steel production to fall 1.5 mln T in Q4

Statistics

42 Global Crude Steel Production in July 2022 down 6.5% YoY

43 SIAM appoints Mr Vinod Aggarwal as its new President

44 SIAM

Disclaimer :

The views and opinions expressed in the articles are solely of the authors. The Editor may not subscribe to these.

Feedback :

Your feedback / suggestions regarding the content will be appreciated
editorial@metalworld.co.in



Go beyond optimal performance with Mobil Vacuoline™ series.

Outstanding oxidation and thermal stability

Formulated using high quality mineral base oils and a unique additive technology



mobil.in/business



mobil.b2b@exxonmobil.com

© 2022 ExxonMobil. All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries.



Indian automotive sector to enhance the demand for Micro-alloyed Steel application in EVs

“Indian automotive sector will continue its demand for steel application in suspension, transmission & body. More importantly, Product mix of alloy steel may change to high-strength-low-alloy (e.g., Micro-alloyed) steel to response light-weight requirement for e-vehicles i.e., to improve battery efficiency”

Alok Vashishth

Head – Sales & Marketing
Kalyani Steel



Alok Vashishth is a metallurgist from MNIT Jaipur and also completed his PGDBM from Symbiosis Institute. He has total experience of 25 years in the field of Steel Industries with multiple roles and responsibilities entrusted on him. He gained vast and unique exposure of steel industries & its associated sectors in both flats & long product, handled almost all products category on a Pan India.

Presently, he is Head – Sales & Marketing in Kalyani Steel with main focus on domestic and export market. Prior to KSL, he was associated with JSW Steel over 17 years in various roles and responsibilities.

D A Chandekar, Editor & CEO, Steelworld magazine had an exclusive interaction with Alok Vashishth to understand the present trends in special steel industry and upcoming demand coming from Automobile segment – EV industry.

Excerpts

How do you analyse the present trend in Indian steel sector, especially special steels?

After imposition of export duty of 15 % (in almost 95% finished Steel) in May 2022, the export is declined by

64% YOY to 2.2 MT from 6 MT (April 22 to Aug. 22) but this is the case for non-alloy category. In Alloy steel (Including Stainless) which is not covered in duty purview, export is increased by 328% YOY in Aug. 22 to 0.34 MT vs 0.08MT in Aug. 21. The

faster than expected recovery in auto sector where avg. 75% alloy steel has direct end use, keep the demand floating to alloy-steel mills. We are confident of current demand to pick up after monsoon in coming festive months. Auto major may touch 1 million PV sales in current quarter due to sustain demand & new launches. Government thrust on many projects would enhance the positive sentiments further.

What, according to you, are its prospects in the coming's months and years?

Going forward, the path for alloy steel segment is not easy due to green push in entire end-to-end supply chain. This needs extra efforts and money

Drive the Steel Industry with our Low Voltage Drive & Switchgear Products

- Swiftly move heavy weights with high torque at low speed
- Withstands high supply voltage fluctuation: 323 V to 550 V
- Lifelong components with life check functions, control circuit board corrosion diagnosis
- Support to induction motors as well as PM motors
- Network safety, Drives on IoT, smart phone connectivity and many more



MITSUBISHI ELECTRIC INDIA PVT. LTD.

Factory Automation and Industrial Division

ICC-Devi Gaurav Technology Park, Unit No. 402, Fourth Floor,
Opp. Vallabh Nagar Bus Depot, Pune-411018, Maharashtra, India.
Email ID: MEI-FAID-INFO@asia.meap.com





Face to Face

to revamp all process in a very short time to meet stringent carbon (GHG) emission norms. Alloy steel demand in auto sector will come down surely in long run due to electric-vehicles and therefore scope for other non-auto sectors like defence, mining, railway, renewable & others can be explored by steel mills for critical-steel-grades. Govt. encourages participation of private players in these sectors.

How is customer profile of special steels changing?

Alloy steel mills has more than 95 % demand in tier 1 to tier 3 vendors of auto majors. Therefore, any changes in customer's requirement (techno-commercial) will have direct bearing on steel mills. For example, the shift from ICE into Electric will surely be difficult for Auto component units thereby impact steel mills as well in next 7 to 10 years.

Most of the OEMs globally are chasing for green-initiative in steel manufacturing so called Green-steel and this is visible in day-to-day interactions with respective auto vendors as well. Due to OEMs push, steels mills have intensified the efforts for green steel as it will fetch extra premium.

Another change, seen in customers are focusing on e-vehicles (All category

i.e.,SHEV, FCEV, BEV& PHEV) by auto companies including TML, M&M,Toyota,Honda, Hyundai, Kia,M G Motors, Hero MotoCorp, Bajaj Auto & TVS which need more precision in steel product & application (e.g. precision rolling), hence requires



technical upgradation in steel manufacturing along with higher level of skill sets.

As an important user of special steels, how do you see the future of auto industry in India?

We all are aware of serious supply disruption in auto sector on account of various covid-restrictions, chip shortage & semiconductors in covid period thereby new normal now is one-plus-one or two manufacturing locations for end-to-end supply chain. India emerges first & only most viable destination for global auto majors. This will give countless opportunities for

India steel mills in next decades but only challenge is to meet global standard not only in high steel-grade but comparable best services with changed mind-set.

How big and how soon will be the effect of EV on special steels demand?

With the deeper penetration of EV vehicles more particular in 2W ,3W, e-bus & e-LCV up to 7 ton, the alloy steel requirement will definitely come down ranging from 50% to 70 % because of majority parts related to engine will go away. However, impact on M&HCV will be very limited. Steel application in suspension, transmission& body will continue to have demand in all category of auto sector. Product mix of alloy steel may change to high-strength-low-alloy (e.g., Micro-alloyed)steel to response light-weight requirement for e-vehicles i.e., to improve battery efficiency. ■



ArcelorMittal

TRUST
that stands
the test of time



Let us take you back in time, 19 years ago. PT ISPAT in Indonesia installed an EASTERN Recuperator in their mother plant at Surabaya. A lot has changed in the last two decades. They have evolved, transformed, and grown. They are now,

ArcelorMittal

The World Largest Steel Makers.

But their trust in our promise remains unchanged. ArcelorMittal continues upgrading to EASTERN Recuperators in their plants worldwide for lesser specific fuel consumption, lesser emissions and more. In 2022, ISPAT-SURABAYA gave us a challenge – Replace the 19-year-old Recuperator with a new one for 30% higher capacity and 20% more recovery, but in the existing space. EASTERN did this with flying colours. And we also repeated it at ISPAT, Bukit Baja, Indonesia. And a cherished relationship continues.

Traversing new decades and climbing greater heights. Together.



ZERO
MAINTENANCE.
FIT & FORGET



40
YEARS
EXPERIENCE



100%
CUSTOM
DESIGNED



4000+
INSTALLATIONS
WORLDWIDE

EASTERN EQUIPMENT & ENGINEERS P. LTD.

12, Pretoria Street, Kolkata - 700 071, INDIA

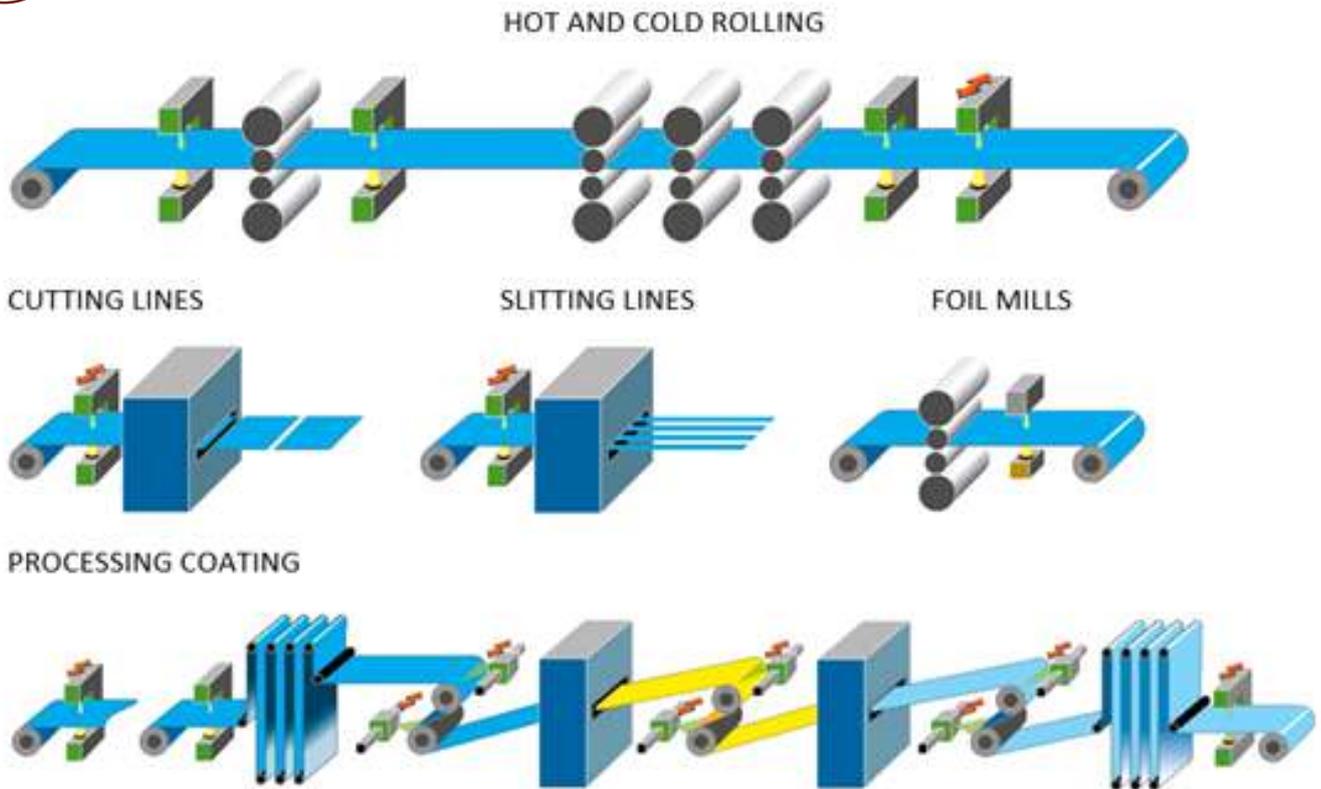
+91 33 22900187

central@recuperators.in





Analysis



single or triple channel measurement: X-ray, isotopes, and laser technology

EMG iTiM high-precision thickness measurement solution for metallic flat products

In May of this year, EMG Automation GmbH took over MESACON Messelektronik GmbH in Dresden and integrated the company's versatile thickness measurement solutions into the product portfolio of the "Business Unit Metals". This is an important step towards completing EMG's range of quality assurance systems for the manufacturing of metallic flat products. In addition to various width measurement solutions and the online geometry measurement of slabs, EMG now offers the complete

spectrum of thickness measurement systems required for almost every manufacturing and processing step.

The expansion of the product portfolio by the thickness measurement - under the product name EMG iTiM - means for the quality management the availability of a wide range of sensor and automation solutions from one source!

EMG iTiM solutions are characterised by the combination respectively use of a wide variety of physical

measuring methods, a high degree of flexibility in design and easy integration into the user's automation environment. The new systems ideally complement the solutions for online oil film thickness measurement already known under the product name EMG SOLID®, which can now also be used for measuring the layer thickness of insulating coatings on electrical sheet.

[Technological competence paired with application knowledge](#)

High-precision, fully automatic online thickness

www.pincgroup.com

**SATISFACTION
GUARANTEED**



World - Class Refractory Monolithics & Precast Blocks
Industry Specialization - Power, Refineries &
Petro Chemicals, Cement, Mineral Processing,
Steel & Sponge Iron, Aluminium, Glass, Incineration

**When Performance is Priority,
Count on Us**



Totale Global Pvt Ltd
(Formerly Padmaja Inc)

71-C, New Avadi Road, Kilpauk, Chennai - 600010
Ph: +91-44-42183033 | Email: totale@pincgroup.com





Analysis

measurements require a high degree of technological competence, which must relate to a wide range of applications. Only a precise understanding of the specifics of the application and consideration of the accuracy requirements will result in a customised solution for the individual application. Laser measurement systems, for example, are easy to use and comparatively cost-

measuring system EMG iTiM iso works with different isotopes depending on the field of application and is used in both hot and cold processes. The flexible system design enables both single-point measurement systems and complex thickness profile measurements.

EMGiTiMxray

EMG iTiMxray uses the high-precision X-ray thickness measurement method. EMG

production line, which represents an economical alternative to more complex and costly system solutions, especially for steel and aluminium service centres and automotive lines.

Field of competence: retrofits and modernisations

The broad availability of a wide range of sensor technologies and EMG's extensive integration and application know-how enable the customer to realise a very economical

and efficient upgrade of existing systems by reusing system components during retrofitting and modernisation.

By expanding the EMG product portfolio of quality assurance systems with the EMG iTiM thickness measurement solutions, the user receives a proven and reliable solution for precise

effective to purchase, but have physical limitations in terms of absolute measurement accuracy. Here the comprehensive solution expertise of the extended EMG team, based on decades of experience, comes into play. This is technologically reflected in the application spectrum of the EMG iTiM sensor family. [The EMG iTiM thickness measurement solutions](#)
EMG iTiM iso
The isotope radiation-based

iTiMxray can be used with a wide variety of materials due to the different generator voltages. From wafer-thin foils to thick strips. Here, too, single-point measurements and high-resolution thickness profile measurements are possible.
EMG iTiM laser
The EMG iTiM laser optical thickness measurement systems are characterised by low complexity, compact space requirements and flexible integration into the

measurement of strip thickness in a wide range of applications. Each installation is configured line-specifically and equipped with the appropriate combination and design of sensors for the specific application. In addition, customers worldwide benefit from EMG's existing international service network with personal expert advice directly on site. ■





PBL. The undisputed leader in Geared Motors.

At PBL, we have become a name synonymous with world-class Geared Motors. Thanks to the wide range of products we offer, our PAN India and global distribution network, and a rich legacy of introducing many a pioneering and innovative products. Now, that's what we call undisputed leadership.



Series M
Helical Inline
Geared Motor



Series C
Heliworm
Geared Motor



Series F
Parallel Shaft
Geared Motor



Series K
Helibevel
Geared Motor



Series J
Shaft Mounted
Speed Reducer

GEARED MOTORS | GEAR BOXES | CUSTOMIZED GEARS | DRIVE SOLUTIONS

- Robust design • Modular construction • User-friendly interface • Quick installation
- Economical operation • Easy maintenance

Phone: +91-2692-231070, 231120, +91-75675 67567 | Website: www.powerbuild.in | E-mail: infopbl@powerbuild.in |  





ExxonMobil showcases innovation in new-age fluid and digital reliability solutions at MMMM 2022

ExxonMobil, a global leader in lubrication technology innovation, showcased its complete range of new-age fluid and digital reliability solutions at the Minerals, Metals, Metallurgy and Materials (MMMM) Exhibition 2022. ExxonMobil participated in the event and featured its full range of Mobil™ branded lubricants, services, and digital solutions, specific to the steel sector.

Minerals, Metals, Metallurgy & Materials (MMMM) is an acclaimed biennial International Exhibition and Conference committed to the promotion and development of the metal and allied Industries. The event started in 1993 in association with The Indian Institute of Metals – Delhi Chapter (IIM-DC) as a trade platform with presence of all leading companies of steel and metal industry. It is now hosting its 13th edition in New Delhi.

Discussing Mobil's range of products and services at MMMM 2022, Rupinder Paintal, Director – Market Development, ExxonMobil Lubricants Pvt. Ltd., said, "Our company's core vision rests in unlocking value for our partners, OEMs, and end users, and we are driving innovation to constantly raise the bar for performance and quality. Our solutions are tailor-made to aid clients in maintaining trouble-free operations, lowering total cost of ownership, ensuring increased productivity and



profitability. In 2022, we hope to multiply our fluid reliability and digital solutions business, which we have already expanded for the steel industry."

At MMMM 2022, Mobil showcased its portfolio of products for the steel sector that is emerging as a key contributor to India's economic growth.

This includes the Mobil SHC™ 600 Series gear and circulating oils that have been delivering maximum production uptime and top performance in the steel sector. It has also been recommended by more than 500 major equipment builders and is known to reduce energy consumption. Similarly, the Mobil DTE 10 Excel™ Series has been tailor-made to meet the needs of modern, high pressure, industrial and mobile equipment hydraulic systems. Also, Mobil showcased the Mobilgrease XHP™ 462 Moly that provides excellent adhesion, structural stability and resistance to water contamination. Mobil is also showcasing its range of extra high-performance diesel engine oils like the

Mobil Delvac MX™ ESP 15W-40. Mobil also displayed its digital services solutions that are helping businesses reap the benefits of Industry 4.0. These include the Mobil ServSM Lubricant Analysis (MSLA) program that has been developed to render precise oil monitoring and analysis, assisting businesses to achieving better efficiency. The exhibition has also seen demonstrations of Mobil's other premium service offerings such as Mobil ServSM IIoT Insights, Mobil ServSM Grease Analysis (MSGA) program, among others.

The 13th edition of International Exhibition and Conference on Minerals, Metals, Metallurgy & Materials was held at Pragati Maidan, New Delhi, and Mobil's products will be displayed at the M114 pavilion.

ExxonMobil's downstream business engages in the distribution, sales and marketing of Mobil branded lubricants and specialties. The chemicals business provides market development support, analytical and reporting services. It also conducts chemical product application support services and product testing support at its technology center in Bengaluru. The upstream business provides consulting and LNG market development support services for other ExxonMobil upstream affiliates. The Global Business Center/Technical Center provides a range of support services for ExxonMobil's operations around the globe. ExxonMobil contributes to a wide range of programs in India that support education, health and the community.

EMG iTiM

Thickness
measurement in
perfection

Through thick and thin: Laser, X-ray and isotope technology

EMG now offers the complete spectrum of thickness measurement systems required for almost every manufacturing and processing step!

- » Laser, X-ray & isotope technology up to a measuring accuracy of ± 0.1 %
- » Sampling times up to 0.2 ms
- » Modular software design & variable interface concept
- » Usable in cold rolling, steel & aluminium service centres, automotive industry
- » Plug and play for your existing processing lines





Steel decarbonising expects a US\$1.4 trillion investment by 2050 – Wood Mackenzie

As per Wood Mackenzie's latest report on Decarbonising of steel and iron ore will require US\$1.4 trillion of investment by 2050. This presents an urgent challenge and enormous opportunity according to Wood Mackenzie's latest Horizons research report, Pedal to the metal: Iron and steel's \$1.4 trillion shot at decarbonisation. The analysis by Wood Mackenzie, a Verisk

business, points to the industrialised world's reliance on steel, with 2.2 billion tonnes of production required to meet global steel demand by 2050 – a 15% increase from 2021. From iron ore mining to steel manufacturing, the industry is highly carbon intensive. Iron and steel production emit a combined 3.4 billion tonnes of carbon annually – equal to 7% of global emissions. Malan Wu, research director

at Wood Mackenzie, and lead author of the report, said: "Decarbonising the steel industry is a staggeringly big task. To meet Wood Mackenzie's 1.5 °C accelerated energy transition scenario by 2050, steel emissions must reduce by 90% from current levels. There is an urgent need to act now to decarbonise the iron and steel sectors. Business as usual is no longer sustainable." Iron and steel investments to reach net zero by 2050 Wood Mackenzie's analysis

VAS

SPECTROMETERS

PLATINUM SERIES METAL ANALYZER

REINFORCED WITH **FUTURISTIC DESIGN**
FOR MEETING THE NEEDS OF **STEEL INDUSTRY**



GOLD PLUS X



SILVER PLUS



eMission



VAS SPECTROMETERS PVT. LTD.

Unit No 107, Bldg No 17,
Samhita International Complex
MTNL Lane Off. Sakinaka,
Andheri, Mumnai 400 072
INDIA

www.vasbharat.in

www.vasspectrometers.com

www.vas-spectrometers.com



sales@vasbharat.com

LEADING INNOVATION IN SPECTROSCOPY



Industry Update

sets out the revolution required at every stage of the industrial value chain, from mining to consumption, which presents an investment opportunity for operators as the industry works towards net zero by 2050.

Wood Mackenzie's analysis shows that US\$800-900 billion will be essential to abate carbon from existing steelmaking infrastructure, such as new hydrogen-based direct reduced iron

oxide electrolysis running on renewable energy. Switching to clean energy will also require around 2,000 gigawatts of dedicated renewable generation capacity, equivalent to two-thirds of current global renewable generation capacity."

"A hydrogen ecosystem will also need to be developed for green steel, as decarbonisation will require around 50 million tonnes per annum of competitively

feedstocks are likely to inflate steel production costs by 15-20%, in which steelmakers will pay approx. US\$100 per tonne by 2050 to align themselves to a 1.5 °C goal by 2050, according to Wood Mackenzie estimates.

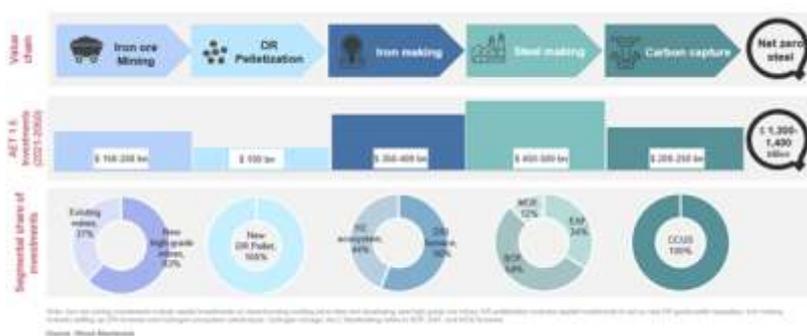
Wu added: "While steelmakers will have to swallow the price hikes for raw materials, carbon abatement costs will ultimately be passed onto steel end-users, meaning it is the consumer who must pay for the green premiums."

Regional disparities will emerge

The iron and steel industry will also require support from the global carbon policy. To date, most national carbon markets are nascent and concentrated in mature economies. As more than 60% of steel production comes from China, Beijing must implement aggressive carbon pricing and taxation if steel's high carbon footprint is to be addressed.

Wu said: "Regional disparity will emerge, as a global response looks unlikely. Carbon mitigation tactics and strategies will vary widely, with mature economies – such as the EU, the US, Japan and South Korea – spending 50% more than emerging economies. Mature economies will also decarbonise much faster incurring a higher carbon abatement cost."

"The transition to net zero calls for collaborative action globally and a unified approach across the value chain to turn risks into opportunities," Wu concluded.



(DRI) and electric arc furnaces.

Wu said: "Mining companies will need to play an active role in cutting their operational emissions and invest in new high-grade mines and green pellet capacities to feed green steel. In turn, this will require five times the current supply of high-grade pellet feed, equivalent to 750 million tonnes, translating into an investment of US\$250-300 billion.

"To achieve net zero by 2050, three-quarters of steel production will have to use low-carbon technologies, requiring the commercialisation and uptake of new technologies such as DRI and molten

priced green hydrogen, with commercial viability versus conventional steelmaking routes requiring green hydrogen supply at US\$2/kg," Wu added.

Carbon offset measures and a 'green premium' are inevitable

The report warns that these measures will still fall short of emissions targets, necessitating an incremental US\$200-250 billion investment in carbon offset measures, such as Carbon Capture, Utilisation and Storage (CCUS), as the industry will need to capture and store 470 million tonnes of carbon to reach its emission target in 2050.

Green premiums are also inevitable, given new technologies and low carbon

SPECIALLY DESIGNED FOR STEEL PLANTS
MOLTEN METAL TEMPERATURE MEASURING SYSTEM


LMI-2014

LLC-2010

LMI-2010

LMI-2012

LMI-2015

Applications

- ✓ Molten metal temperature measurement of Ferrous/Non-Ferrous metals
- ✓ Steel / Aluminium Melting and Pouring Temperature measurement

Features

- ✓ Thermocouple Inputs: K,R,S,B
- ✓ Average / Plateau measurement techniques
- ✓ Available in 2, 4 and 8 inch display size
- ✓ Spot and Continuous measurement method
- ✓ Built in memory for 100 readings with time & date
- ✓ Remote display interface through RS-485
- ✓ Real time record storage
- ✓ Isolated and Linearized Retransmission of 4-20mA
- ✓ Front panel lamps and built in hooter to indicate status of measurement cycle
- ✓ Serial port for LAN / USB interface to computer
- ✓ Real time clock

**MADE
IN
INDIA**

Features

- ✓ Direct Analog input from Thermocouples, RTD Pt-100, Voltage and Current sources
- ✓ Vivid display for long distance viewing
- ✓ Available in 4 inch and 8 inch digit size
- ✓ Dual sided display in select models
- ✓ Display range of -1999 to +9999
- ✓ Wall mount, Desk Mount and Ceiling mount
- ✓ Programmable range and decimal point

LARGE DISPLAY JUMBO INDICATORS

Applications

- ✓ View temperature of molten metals
- ✓ Online monitoring of Temperature, Speed, RPM etc.
- ✓ Process / Item / Batch counter display
- ✓ Mainly used by the steel plants



DPI-4000

DPI-8000

DPI-4000-D

**WITH INDUSTRIES
SINCE 1991**





First Car showroom in Secunderabad display cars : FIAT 100 & Topolino.

India is gearing up for Advanced Mobility

Indian Automotive Industry has progressed and emerged as one of the global players meeting world class norms related to Safety, Emission, Fuel Consumption, RRR, Non-Conventional Fuel, Electric Vehicle etc.. In addition to these global features, Indian Automotive Designs are known for Roomy design, Robustness and ease of service.

In 1897, the first car ran on an Indian road. Through the 1930s, cars were imports only, and in small numbers. An embryonic automotive industry emerged in India in the 1940s. Hindustan Motors was launched in 1942, long-time competitor

Premier in 1944, building Chrysler, Dodge, and Fiat products respectively. Mahindra & Mahindra was established by two brothers in 1945, and began assembly of Jeep CJ-3A utility vehicles. In the same years, J. R. D. Tata, the chairman of Tata Group founded TATA Engineering and Locomotive Company (now Tata Motors) in Jamshedpur. Following independence in 1947, the Government of India and the private sector launched efforts to create an automotive-component manufacturing industry to supply to the automobile industry. In 1953, an import substitution programme was launched, and the import of



Udayan Pathak

FIE, FASM Automotive Materials Experts & Ex-Head, World Class Quality, Engineering Research Centre, Tata Motors, Pune. He is global consultant in area of Materials Engineering, Training and Innovation Management. He is presently a Chairperson ASM International Pune Chapter

fully built-up cars began to be restricted.

Innovative Automotive Applications comprises the core of Automotive industry in India. This has served not only the Urban sector but also served Semi-Urban & Rural demography equally. In the domain of personal vehicles, Laxmi-48 (1972) manufactured by Kolhapur based Kirloskar Ghatge Patil was the first rural and semi-urban Two-Wheeler catering specially Milkmen. This vehicle had great contribution in the success of UNs Milk Production enhancement drive in South Asian Countries specifically India.

**Providing
Customised Gearing Solutions
To The Steel Industry For Over 50 Years**



**Helical Planetary
Gearbox
for Hoisting**



**Entry Tension Reel
Gearbox**



**Bevel Helical Gearbox
for Ore Handling Equipment**



**Leveller Gearbox
with Inch Drive**

Esenpro Power Transmission Pvt. Ltd.

Reg. Office: Esenpro House, 24, Marol Co-op Industrial Estate Ltd.,
Off. M.V. Road, Andheri (E), Mumbai - 400 059, (India)

Email: marketing@esenpro.com, sales@esenpro.com, jshah@esenpro.com

Telephone: +91 (22) 2850 5132 / 3685 / 6471 | Fax: +91 (22) 2850 4501 / 2848



**ESENPRO POWER
TRANSMISSION PVT LTD**



Technology



Motobécane Mobylette designed in 1949 in France was launched as Suvega Super 50 in India. It was first moped launched in India from Coimbtore, Another innovative product from Bajaj Auto was M 50 (1981) which dominated not only Rural & semi urban markets but also Urban markets. The tagline 'Hamara Bajaj' was close to all Indians.

The first aspirational vehicle was Luna (1972) from Kinetic. Lower middleclass population also looked at Luna as their vehicle with tagline "Chal meri Luna". The perceived women's scooter from Kinetic Engineering was Honda (1984) with vario drive can also be counted as a novel product.

TVS Motors company introduced TVS – Suzuki as first Low consumption motorcycle on Indian Roads

in early 1980's. Later came Hero Honda and Bajaj Kawasaki .



TVS -Suzuki

Suvega Super 50

The need for low-cost public transport both in rural & urban areas was catered by three-wheeler from Bajaj Tempo (Now Force Motors) Hanseat. Most of the public transport in Northern states like MP, UP, Rajasthan, Punjab was solely dependent on this Hanseat



In the year 1986 - Silver Jubilee year, Tata Motors brought a major breakthrough in Indian Commercial Vehicle space. Introduction of First Fully Indigenously Designed & Manufactured Light Commercial Vehicle Tata 407. This vehicle was a unique in many respects. Tata 407 dominated Indian Roads with more than 75% market share consistently. Tata 407 beat the leading models from global Automotive giants like Toyota (DCM Toyota Make Dyna -1985), Nissan (Alwyn Nissan – Cab star -1986) & Mazda (Swaraj Mazda 40T-1985). This vehicle managed vehicle weight distribution

carefully to use single tyre for Rear Axle while all other players had twin tyres. The vehicle beat the global players with its low initial cost, localised parts from Indian vendors, low cost of ownership, simple electric circuitry, semi forward facia giving safety feel to drivers & passengers.

Tata Indica- the First Indian Hatchback car with Diesel Engine was another Innovative creation from Tata Motors Pune team. The tagline 'More Car per Car' reflected key feature, spacious & roomy interior. While Indica has external dimensions close to Maruti the internal usable dimensions were similar to Ambassador.



Mr Ratan Tata rolling out first Indica from Tata Motors Pune Plant.

The Tata Nano a 1000 US \$ Car is considered as the World's Automotive wonder, beating all low-cost technologies in the world. Mr Girish Wagh was leader of this team.

Government of India under leadership of Hon PM Shri Narendra Modi and Hon. Minister for Roads, Transport & Highways Shri Nitin Gadkari is committed to many aspects of Mobility. After losing its key member from ministry Late Goipnath Munde in a road

More than Six decades of Pure excellence... and still counting



More than 6 decades of Responsible Mining and Sustainability

- * One of the best performing Public Sector Enterprises of India
- * The single largest producer of iron ore in India
- * Venturing into steel by commissioning 3.0 MTPA Steel Plant at Nagarnar, Chhattisgarh
- * Sole producer of Diamonds in India
- * Bringing socio-economic transformation through innovative and impactful CSR initiatives in the less developed regions of the Country.

NMDC re-dedicates itself with a fresh zeal and renewed enthusiasm, energy and strategy to achieve greater heights in delivering value for all its stakeholders.



एनएमडीसी



NMDC

NMDC Limited

(A Government of India Enterprise)

Khanij Bhavan, 10-3-311/A, Castle Hills,
Masab Tank, Hyderabad -500 028, Telangana, India
CIN : L13100TG1958GO1001674

[f](#) [t](#) [@](#) [in](#) [v](#) /nmdclimited | www.nmdc.co.in

Eco-Friendly Miner



Technology

accident govt. has become very strict for passenger and pedestrian safety. The Bharat New Vehicle Safety Assessment Program, popularly known as the Bharat NCAP, is a New Car Assessment Program for India. Cars sold in the country are assigned by star ratings based on their safety performance. It was implemented in phases, as per the plans drawn up by the National Automotive Testing and R&D Infrastructure Project. It is the 10th NCAP in the world and is being set up by the Government of India. In passenger cars today two airbags are mandatory however, effective from October 1st, 2022, six airbags will be mandatory. One of the top reasons identified for accidents is over speeding. To address this all public transport vehicles (Buses & Taxis) will be fitted with speed Governors, restricting max speed to 80 KMPH. With increasing network of freeways and four / six lanes highways, it is proposed to be 100 KMPH and 140 KMPH on Samruddhi Marg. Government committed to reduce road accident deaths by 50% by 2025 and Zero fatal accidents by 2030.

Like safety, reduction in vehicular emissions by catching up global norms is another serious agenda of the government. By skipping BS V stage, government forced Indian Automotive Business to comply with BS VI norms from 1st April 2020.

Typically, in the previous stages, it was noticed that the government had failed to make fuels availability to meet BS Norms. However, for BS VI compliance the required fuel was available six in advance of government committed date and all automotive OEMs were taken to shock.

The longevity of vehicles and tendency of third and fourth ownership of vehicle in rural areas moved many polluting vehicles to rural India. To address this, the government announced Vehicle Scrappage Policy. While globally, the primary aim of Vehicle scrappage policies was to stimulate automotive demands in slow and sluggish markets, in India it is focussed on getting rid of old inefficient vehicles. This will also help steel Industry by reducing need of Imported scrap and thus saving lot of foreign exchange vis-à-vis making enhancing availability of clean and good quality scrap.

The Indian Mobility Industry has made significant progress in the usage of alternate fuel such as 10% Ethanol blending to achieve standard 87 Octane. Efforts are on to blend 20% ethanol. Spice Jet, an Indian Airlines company flew its 72 seater Bombardier Q400 aircraft using Bio Fuel. It reduced the carbon emission by 15% than usual by using 350 kilograms of biomass. However, commercially it is yet to be established as a routine practice.



The 5th Generation Light Combat Aircraft(LCA) Tejas finds its place in the Top 10 Fighter Aircraft, with other big names like Lockheed Martin, Boeing, Sukhoi, Dassault, Chengdu etc. LCA Tejas is considered as Lightest & Smallest Supersonic Fighter Jet.

Electric Vehicles right from Mopeds to Public Transport Buses are in plying on Indian roads. Ambitious Faster Adoption and Manufacturing of Hybrid and Electric Vehicles - FAME program of Indian Government has supported this. The exchequer of ₹ 529 Crores for FAME I and ₹ 10,000 Crores for FAME II was made available and spent. Close to 10,00,000 passenger vehicles were sold and registered in India till Feb 2022. While distance travelled between two consecutive battery charging is still a challenge, the option of swipecable batteries is being explored.

Nagpur has emerged as a Major Base for Aircraft Maintenance and Over haul base for Asia Pacific Region. Boeing being the first Aircraft company to set up mega Maintenance and Overhaul

ABOUT US

CHAMPION DEALERS (MUMBAI) PVT.LTD.

Incorporated as a Private Limited Company in the year 2010, at Mumbai (Maharashtra, India). We Champion Dealers (Mumbai) Private Limited are Importer, Exporter, Wholesaler & Trader of a qualitative assortment Rounds, Billet, Bloom, Wire Rod & HMS.

We are selling material of renowned manufacturer of India like Rashtriya Ispat Nigam Limited (RINL), Steel Authority Of India Ltd (SAIL), Jsw Steel Ltd.(JSW), R.L. Steels And Energy Ltd., Jailaxmi Casting & Alloys Pvt Ltd, Kisco Casting (India) Ltd, Arjas Steel Private Ltd, etc. We also import from Korea, Japan, China, & European Countries.

The Company have multiple products using empire with stocking capacity of 5,000 M/T and distribution network all over India.

CIN : U51909MH2010PTC245740

IEC : 3110018209

GSTIN : 27AADCC9080C1ZR (HO. MAHARASHTRA) / 37AADCC9080C1ZQ (BRANCH: ANDHRA PRADESH)



SUPPLIERS



INDUSTRIES WE SERVE





Technology

base in MIHAN Nagpur, others to join are- Dassault RelianceAerospace, Thales Reliance Defence Systems, AARIndamer Technic Pvt. Ltd. Air India Engineering Services, Kalpna Saroj Aviation etc.

John Deere Tractors manufactured in Sanaswadi plant near Pun are considered as globally best amongst same models manufactured in Germany & USA. John Deere set up huge Design Centre.

The talent, precision, innovative mind-set and hardworking tendency available in India is putting tough challenges for survival of Design Centres globally as most Automotive, Loco and Aircraft Industry players are eyeing on Indiaas their next preferred Destination.

With enhanced government focus on EVs, the quick development of EVs in India has surprised many Global giants. Tata Nexon is the most popular among car users. Most of the Automotive players are following the Tata policy of developing Electric versions of new models which are being launched with fossil fuel models.





Ventura Alloy and Steels Private Limited

We are Importer, Exporter, Stockist, Distributor & Suppliers for
Tool & Alloy - Special and Die Steels, Forging Components Spring Steel - Wire Rod, Square & Round Bars
Coiled & Disc Springs, Tools Collets, Impact Sockets Etc.



**HOT WORK
TOOL STEELS**



**COLD WORK
TOOL STEELS**



PLASTIC MOULD STEELS



ALLOY STEELS



SPRING STEELS

HOT WORK STEEL (IND/USA/EUR)

H13 / AISI H13 / DIN 2314
H11 / AISI H11 / DIN 2344
H10 / AISI H10 / DIN 2343
H21 / AISI H21 / DIN 2581
H10 / AISI H10 / DIN 2365
H12 / AISI H12 / DIN 2616

COLD WORK STEEL (IND/USA/EUR)

H13/H13R-D2/AISI D2/DIN 2379 A2/AISI A2/DIN 2363
H11/H11R-D3/AISI D3/DIN 2080 O1/AISI O1/DIN 2510
D5/Co12NiV/DIN 2604

PLASTIC MOULD STEEL (IND/USA/EUR)

P20 - Ni/AISI P20 - Ni/DIN 2318
P20/AISI P20/DIN 2311

ALLOY STEEL (IND/USA/EUR)

EN 24/AISI 4340/40NiCrMo84 / 34CrNiMo8
EN 19/AISI 4140/ 42CrMo4
EN 31/AISI 52100/100Cr6
20MnCr5
SAE 8620

SPRING STEEL

EN 47 / 50CrV4 / 51CrV4 / AISI 6150 / SUP10 / DIN 8159
SUP9 / AISI 5155 / DIN 1.7176
SAE 9254 / AISI 9254

CARBON STEEL

SAE 1018 MS
C45 / EN8D
EN1A
EN1A Ph

Head Office

Unit No. 1201 & 1202, Ghanshyam Enclave,
New Link Road, Near Laljipada Police Station, Kandivali (West),
Mumbai - 400087.
Tel.: +91 22 35034301 - 307 / 35034311 - 319 |
Mob.: 9819225666 & 8591313565

Stocking/ Machining Centre

Gala No. 6, Building No. 183, Indian Corporation, Mouje Gundavli
(Mankoli - Phata) Dapoda, Taluka - Bhiwandi : 421302
Tel: +91 7977097655 | 7977097657
Email: sales@venturasteels.com | Web: www.venturasteels.com

SOVEREIGN SOLUTIONS FOR ALLOY, SPRING AND DIE STEELS



India set the roadmap to reduce carbon emissions by one million tons by 2030

In its journey of achieving net-zero by 2070, India has set an ambitious and actionable roadmap – including the goal of reducing total projected carbon emissions by one million tons through 2030, and cutting carbon intensity of the economy by less than 45 per cent as reported by Deepesh Nanda, CEO, GE Gas Power South Asia.

As the nation embraces 'panchamitra' or the five-fold strategy towards decarbonization, evaluating the role of heavy industries that are crucial in driving economic progress while also being large-scale emitters of greenhouse

gases becomes a strategic priority.

The steel industry is a key stakeholder for the National Hydrogen Mission and, in addition to implementing state-of-the-art clean technologies, creating carbon sinks, and improving raw material quality – two pilot plants are being built under a public-private partnership model to explore the use of green hydrogen in direct reduced iron (DRI) production.

As per the Niti Aayog recent report projected India to become global hub for green

steel manufacturing with a capacity of 15-20 million tonnes by 2030, paving a way to make green steel mainstream for the world.

Increasing production, cutting intensity

As the world's second largest producer of crude steel, India plans to more than double production targets to 300 million tons by 2030 and nearly fivefold to 500 million tons by 2047 from 120 million tons of March 2022, 18 per cent higher than in 2021.

Today, with coking coal – 85 per cent of which is imported – serving as one of the two key raw materials in steel production, the sector

**Steelworld
Research Team**

Sanghi Organization

Always a step ahead.



60 TPD
(1800 cu.m./hr.)
Oxygen Plant commissioned at
MSPL - SAIL Bhadravati Project.

Most Power efficient and
Versatile Plants
with Highest safety standards.

SANGHI ORGANIZATION



Manufacturers & Exporters of Oxygen, Nitrogen, Acetylene, Nitrous Oxide and Carbon Dioxide Plants
1-2, Turf View, Opp. Nehru Centre, Seth Motilal G. Sanghi Marg, Worli, Mumbai - 400 018, India.
Tel: 2494 5464 (12 Lines), Fax: {91-22} 2494 7052.
E-mail : mail@sanghioverseas.com | Website : www.sanghioverseas.com





Technology

contributes to roughly 9 per cent of the country's total greenhouse gas emissions in addition to accounting for one-fifth of the industry energy consumption, according to IEA's Iron and Steel Technology Road Map. With over 977 steel plants, the country has outlined its plans to cut carbon dioxide emissions intensity – having already achieved a reduction from 3.1 Tonne/tonne of crude steel (T/tcs) in 2005 to around 2.6 T/tcs by 2020 – and aims to reduce it further to about 2.4 T/tcs by 2030.

The pivot to green steel manufacturing

It would be interesting to dive deeper to evaluate the technology available today for manufacturing green steel. Typically, steel is produced either using an integrated blast furnace/basic oxygen furnace (BF/BOF) or an electric arc furnace (EAF) with coal used as a reductant. Green hydrogen has opened new possibilities to pivot to green steel manufacturing, with advanced technologies helping cut emissions.

DRI or Sponge Iron, which is less capital intensive and offers an alternative steel production route to BF/BOF or scrap EAF, has been growing at scale. However, it also acts as a barrier to fulfil energy efficiency investments. On the other hand, using natural gas as a reductant is gaining ground in several markets which benefit from an abundant supply of natural gas. This not only reduces the need for coking coal but also cuts associated emissions, such

as sulphur oxides and carbon dioxide, with a recent study estimating that natural gas-based DRI had 33 to 41 per cent lower greenhouse gas footprint than coal-based DRI.

Exploring new pathways for 'green steel' manufacturing
One pathway to promote green steel manufacturing is the use of advanced gas turbine generator (GTG) technology that can lead to about 10-15% increase in efficiency. Today, GTGs are being increasingly deployed by global steel majors to achieve as much as 70 per cent reduction in emissions. Indian steel plants with BFG (Blast Furnace Gas) production can repurpose and utilize the existing idle gas assets in the country, underlining their commitment to Scope 3 emissions.

Another strategic approach is to embrace the use of renewable power, including green hydrogen, which replaces fossil fuels both in the manufacture of iron pellets and also for carbon-purification. With India's focus on tapping renewable sources of energy, the steel industry can not only cut fossil fuel use but also achieve lower carbon dioxide emissions. It is estimated that green hydrogen can help achieve a reduction of 15 to 20 per cent of the energy consumed by blast furnaces.

A third and equally significant step is to encourage blending green hydrogen with grey hydrogen – derived from natural gas – which will help bring down overhead costs significantly as well as emissions. A significant shift will come as

larger electrolysis facilities come on board, which will help reduce the price of green hydrogen by up to 60 to 80 percent.

Such innovative processes that leverage the advantage of renewable and cleaner energy sources, and effectively integrate them into production processes will empower India's steel manufacturers to deliver on their commitment to go green.

A four-fold advantage

The advantages of green steel manufacturing are fourfold: One, reduced dependence on coal imports, a growing concern that is compounded with the increase in coking coal prices; two, supporting national goals to move towards hydrogen and clean energy; three, highlighting their environment, social and governance principles by taking into consideration even Scope 3 emissions.

And, finally, it will add to our national advantage by providing Indian steel manufacturers the opportunity to expand to global markets and share their knowhow.

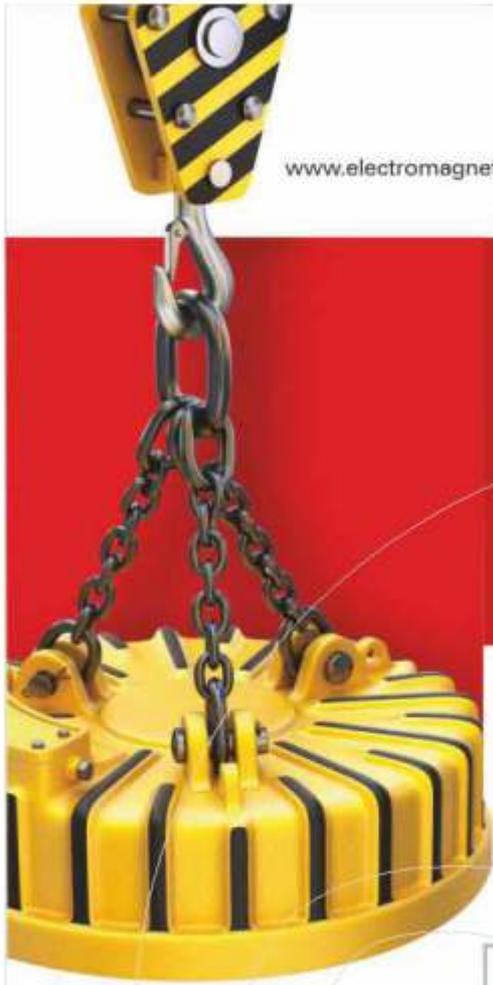
Being the largest exporter of carbon credits with plans to have its own uniform carbon market in one year (2023) as a large finance avenue for energy transition projects and emission reduction, the transformation of the country's steel market by leveraging the power of clean sources will scale up the country's position in the energy value chain. The combined power of renewables, hydrogen and gas as a viable pathway to a cleaner future – and a greener industry – is real and an opportunity to be seized. ■

www.electromagneticindia.com

Ei Electro
Magnetic
Industries

A COMPLETE SOLUTION FOR STEEL INDUSTRIES

Electro magnetic industries for over 43 years, have lead the industry in producing Magnetic Separator/Vibrating equipments for the control and removal of ferrous tramp metal from product movement and processing system.



RECTANGULAR LIFTING
ELECTRO MAGNETS



ELECTRO HYDRAULIC
ORANGE PEET GRAB



VIBRATORY FURNACE CHARGER



FURNACE LINING VIBRATOR



HYDRAULIC PUSHER



OUR PROJECTS



Corporate office & Works :
Plot No: 1, Unit: 2, GIDC Industrial Estate,
Por-Ramangamdi, Vadodara 391 243,
Gujarat, India

www.electromagneticindia.com
sales@electromagneticindia.com



+91-937-621-9322

+91-982-502-8823

+91-932-724-5492

REPRESENTATIVES / AGENT REQUIRE
FROM ALL OVER THE WORLD



TECHNOLOGICAL PERFECTION | GLOBALLY WITH RELIABILITY | EXPERIENCE AND EXPERTISE



India to become world's number one producer of steel: Jyotiraditya Scindia



Union Minister Jyotiraditya M Scindia on Tuesday exuded confidence that India will become the number one producer of steel in the world in the days to come. India is the world's second-largest

producer of crude steel after China.

The minister was speaking during a conference on Indian minerals and metals industry organised by NMDC and Ficci. He was of the view that India has moved from becoming the net importer of steel to the net exporter of steel. He said India's per capita consumption of steel has increased from 57.8 kg in 2013-14 to 78 kg.

The government intends to achieve 300 million tonne (MT) of steel production target by 2030, Scindia said. Steel across the world is the primary sector which results in economic, capital and infrastructure growth.

"Our target policy and focus also has been to turn India from just another player in the steel sector to becoming a force to reckon with," he added.

Steel Minister Jyotiraditya Scindia call for Made in India' steel, as self-reliance in its production



Steel Minister Jyotiraditya Scindia emphasised on the need to promote domestically produced steel or 'Made In India' steel, as self-reliance in its production was a top priority.

Addressing the Indian Minerals and Metals Industry conference, the minister said that in order to promote domestic steel, the government has also introduced a productivity linked incentive scheme for specialised steel, which has an outlay of more than Rs 6,000 crore.

He said that from being a net importer, India has now become a net exporter of steel.

"In the last eight years, several reforms have taken place in the steel sector, due to which India's production capacity has gone up from 102 million tonnes in 2013-14 to 154 million tonnes in the current fiscal", Scindia further said.

Even the per capita consumption of steel has gone up from 57 kg per person to 78 kg per person.

Expressing concern over the higher carbon emissions in the steel sector, Scindia said that by 2030 these levels need to come down by 30 per cent to 40 per cent.

15% export duty on steel to stay till December

The 15% export duty imposed in May on a range of items covering around 95% of the finished steel export basket is likely to stay till December as the steel ministry feels that any roll-back of the duty at this stage may suppress domestic prices.

"Duty rollback may also give unintended signals to market to prefer exports over domestic demand," the ministry said in a note. The ministry is confident domestic demand will go up after the monsoon, particularly because of governments thrust to building infrastructure across the country, and this will put upward pressure on prices.

At the same time, cost of production for the domestic steel makers will rise as prices of major inputs such as coking coal and iron ore are expected to move up.

"In view of this, reduction in duty may be considered after stabilisation of the present volatile market condition, cooling of inflationary pressures and the steel price trends in the next quarter," the ministry said.

In FY 22, India's steel exports at 18.37 million tonnes



(MT), comprising both finished and semi-finished steel, was the highest both in absolute terms and in proportion of production – 11.9% in case of finished steel and 15.3% in case of crude steel.

"Higher exports may have, in part, helped sustain high prices of steel during FY22," the ministry believes. Export duty was imposed on eleven items including hot-rolled coil (HRC) and cold-rolled coil (CRC) on May 21 to contain domestic prices of steel.

Within 20 days of the duty imposition, prices declined by 9-14% by June 10, but the pace of decline moderated since then. The decline was in the range of 5-17% by



23-25 November 2022

Broaden your horizon
metalflow-alliance.com



8th International Exhibition for the Wire & Cable Industry
www.wire-india.com



International Metallurgical Technology, Processes and Metal Products Trade Fair
www.metec-india.com



9th All Indian Exhibition for the Tube and Pipe Industries
www.tube-india.com



9th International Trade Fair Joining-Cutting-Surfacing
www.iewc.in

VISITOR REGISTRATION - NOW OPEN

Registration Link: https://zestgroupindia.in/mdi/metal_flow/

Venue: Bombay Exhibition Center, Goregaon (East)
Mumbai, India

HALL 1
wire India | Tube India
METEC INDIA

HALL 2
INDIA ESSEN WELDING & CUTTING
Conference Programmes

EVENT HIGHLIGHTS

22000* Space (in m²) | 350* Exhibitors | 15000* Visitors | 15* Participating Countries



Latest products & Technology on display



Pre-registration Facility



Power-packed conference sessions



Live Demo



Global brands

* Expected (Figures Including Complete Metal Fair)

COUNTRY PAVILIONS



Germany



Italy

CONFERENCE PARTNERS



23-24 November 2022
25 November 2022



1000 Hrs - 1800 Hrs
1000 Hrs - 1700 Hrs

Organised by
Messe Düsseldorf India Pvt. Ltd.
20th Floor, Tower A, Building No. 5, DLF Cyber City,
Phase II, Gurugram - 122 002, Haryana, India
Tel.: +91 (0)124 4544 500
URL: www.md-india.com

wire India & Tube India

Avnish Seth
Senior Project Manager
E-mail : SethA@md-india.com

METEC INDIA and INDIA ESSEN WELDING & CUTTING

Vivek Bohra
Senior Project Manager
E-mail : BohraV@md-india.com

Powered by





News Update

August 19 compared with the May 21 price. But the decline in domestic prices was lower than the price reduction in the range of 20-39% in the EU and US over the same period.

During the June-July period of the current fiscal, India's exports of finished steel was 1.02 MT, which is 65% lower than 2.88 MT exported in the corresponding period last fiscal.

The steel ministry's study finds that only stainless-steel products saw some rise in exports during the period.

In a recent report, rating agency ICRA said the imposition of export duty on finished steel products, along with the slowdown in demand in international markets, have made exports unattractive. Going by the trend for the first four months of the current fiscal, it said exports may decline by 40-45% in the current fiscal over FY22.

US Steel makers warn on demand trends

The leaders of Nucor Corp. and U.S. Steel Corp. have pushed down investors' expectations of their third-quarter results, saying that their production volumes have retreated from their levels of earlier this year.

In a short statement, Charlotte-based Nucor said earnings



from its steel mills segment—which contributed 84% of the company's first-half pre-tax profits—are forecast to be “considerably lower” in the third quarter versus the three months ended June 30. The company said the main culprits are shrinking margins and lower volumes, “particularly at [its] sheet and plate mills.”

The executives at Nucor said its steel products division, which they boosted earlier this year via the \$3 billion acquisition of C.H.I. Overhead Doors, is on track for a good Q3 and that its raw materials group's results should be in line with the second quarter. But the performance of their steel mills has them aiming for Q3 earnings per share between \$6.30 and \$6.40, well below the consensus analyst estimate of \$7.76 per share.

U.S. Steel CEO David Burritt delivered similar, albeit less severe, news on the morning Sept. 15. The Pittsburgh-based company expects adjusted EBITDA for Q3 to come

in around \$825 million (versus more than \$1.6 billion in Q2) and that adjusted net EPS will be \$1.90 to \$1.95. Analysts' consensus estimate is around \$2.10 per share.

Burritt said U.S. Steel's businesses have faced “market headwinds that have accelerated over the quarter” in several of its end markets. The company has in response temporarily idled a blast furnace and a tin line and pulled forward from October two planned outages, one of them in Central Europe. Still, of the company's four business segments, only the tubular group—its smallest by some margin—is forecast to put up better numbers than in the spring.

“Supply chain issues in automotive and appliance end-markets continue, while containers and packaging has softened, and service center buyers remain on the sidelines,” the company said in its statement.

Worth putting into perspective is that these guidance updates come after Nucor, U.S. Steel and other many other steel manufacturers have been ringing up strong profits in recent quarters. For instance, Nucor's C-suite thinks the company will still deliver record results for the full year. And despite his so-so update, Burritt pointed out that his team still expect the company's third-quarter results will be “solid.” By way of comparison to the forecast \$825 million of Q3 adjusted EBITDA, the company averaged \$1.4 billion per quarter on that front in 2021.

More broadly, the steel companies' heads-ups to investors echo a number of recent economic indicators suggesting that appetite for capital goods, while still strong compared to historical figures, is trending down from its recent levels. The Business Roundtable third-quarter outlook published Sept. 15 illustrated that trend and forecast a further pullback in capital investment plans.

MENA can lead the world in green steel production – Report

The Middle East and North Africa (MENA) region is in a prime position to start producing carbon-neutral or green steel, a new report from the Institute for Energy Economics and Financial Analysis said.

“The MENA region can lead the world if it shifts promptly to renewables and applies green hydrogen in its steel sector,” said author of the report Soroush Basirat.

The steel sector in the region is dominated by Direct Reduced Iron-Electric Arc Furnace (DRI-EAF) technology, which releases lower emissions than the increasingly obsolete coal-fuelled blast furnace and basic oxygen furnace (BF-BOF) process used in 71 percent of global crude steel production in 2021.

On Digital Platform



11th Asian Metallurgy

5-11
Dec 2022

STEEL
& **METAL**
EXPO
On Digital Platform

- World Exposition
- Specialised Panel Discussions
- Corporate Presentations

Organisers

METALWORLD

Devoted to Foundry & Non-Ferrous Metals Industry

STEELWORLD

Devoted to Iron & Steel Industry

steelinmetalexpo.com



News Update

Basirat says the DRI-EAF process, which uses syngas made from natural gas or gasified coal and also electricity, could be zero emissions if green hydrogen (produced using renewable energy-powered electrolysis) and electric arc furnaces powered by renewable energy were used.



"MENA has an established supply of DR-grade iron ore and its iron ore pelletising plants are among the world's largest. In 2021, MENA produced just three percent of global crude steel but accounted for nearly 46 percent of the world's DRI production," the report noted.

"MENA's knowledge of this specific steel technology is an invaluable asset. This production knowledge, abetted by further work on iron ore beneficiation, pelletising and DR plants, is among the most important steel decarbonisation pillars, and will greatly assist MENA's transition".

"Compared to other regions, MENA's existing DRI-EAF capacity means no extra investment is needed for replacing the base technology. All new investment could be focused on expanding production of green hydrogen among other renewables," said the report.

The International Energy Agency (IEA) in its Net Zero Emissions scenario models the global share of hydrogen-based (H₂) DRI-EAF production reaching 29 percent of primary steelmaking by 2050.

BloombergNEF estimates that 56 percent (840 million tonnes) of primary steel production will come from H₂DRI-EAF by 2050 in a net zero emissions scenario.

"A switch from gas-fuelled DRI to green hydrogen could commence ahead of other regions, given MENA's in situ capacity of DRI-EAF. Initially, it would be possible to replace 30 percent of gas with hydrogen in the incumbent fleet of DR plants without any major equipment modifications. The region could then move towards 100 percent green hydrogen to produce carbon-free steel", the report said.

"Having access to high solar energy resources allows for production of green hydrogen at a competitive price," said Basirat. "With MENA's available capacity, producing green

hydrogen below \$1/kg is achievable by 2050."

With the EU soon establishing a Carbon Border Adjustment Mechanism, MENA steel exports would have an advantage if they are zero carbon.

"MENA's producers are ahead in terms of their market positioning and will remain so if they accelerate the transition to carbon-free steel using the green hydrogen DRI-EAF route," said Basirat.

MENA has good infrastructure and pipelines that could facilitate cheaper hydrogen transportation to steel producers, the report noted. Additionally, its steel and mining sector has already invested in the upstream value chain and can supply the high-quality pellets to feed steel companies.

Iran, Saudi Arabia and Egypt are the leading steel players in the MENA region, producing more than 80 percent of the region's total.

US to prioritize low-carbon green construction materials, including steel

The Biden administration announced new actions Sept. 15 to prioritize the purchase of low-carbon-emissions construction materials, including steel, for use in federally funded projects. The federal government will prioritize the purchase of



steel, concrete, asphalt and flat glass that have fewer embedded emissions associated with their manufacturing, transportation, installation, maintenance and disposal, according to a White House fact sheet.

In addition to federal procurement, the Buy Clean actions also will cover federally funded projects, the White House said, noting the Department of Transportation is administering more than \$120 billion in infrastructure spending in fiscal year 2022.

The White House said it is taking these actions to spur the development of low-carbon-emissions construction materials made in the US. The US federal government is the largest direct purchaser in the world and a major infrastructure funder, the White House said.

Along with prioritizing purchases of green materials, the White House also will increase data transparency through supplier reporting to help American manufacturers track and reduce emissions, it said.

The new actions under the federal "Buy Clean" initiative were announced by Transportation Secretary Pete



Buttigieg, US General Services Administration Administrator Robin Carnahan, and Deputy National Climate Advisor Ali Zaidi during a visit to Cleveland-Cliffs' direct reduction plant in Toledo, Ohio.

Cliffs' natural gas DR plant, completed in 2020, supplies hot-briquetted iron (HBI), a low-carbon iron feedstock used in the company's blast furnaces, basic oxygen furnaces and electric-arc furnaces.

"The Cleveland-Cliffs direct reduction steel plant represents the future of US clean manufacturing, producing a lower-carbon intermediary feedstock product that is integrated into steel plate used in a wide variety of products purchased by the federal government, including automobiles, electricity grid transformers, bridge decks, offshore wind platforms, naval submarines, and train tracks," the White House said.

The Biden administration first announced the formation of its Buy Clean Task Force in February.

"We are pleased that the administration continues to recognize that the American steel industry is leading the way on decarbonization, as reflected in today's announcement to prioritize the government's purchase of lower-emissions construction materials for federally funded projects," Kevin Dempsey, CEO of the American Iron and Steel Institute, said in a statement. "Of the major steel-producing countries, the US has the lowest CO2 emissions per ton of steel produced. Our entire industry continues to make key investments to further decrease carbon emissions and advance our leadership position on sustainability."

Steel PLI scheme: Government gets 75 applications from domestic players

Government has received nearly 75 applications from domestic players under the PLI scheme for speciality steel, reported by PTI. According to media reports, the applicants include all major steel players like Tata Steel, JSW Steel, JSPL, AMNS India and SAIL. After shortlisting the proposals, the government will come out with a final list which would take around 35-40 days, the official said. The government had set the final deadline on September 15 after several extensions for receiving proposals from manufacturers for benefits under the PLI (Production-Linked Incentive) scheme for speciality steel. The Union Cabinet in July last year approved a Rs 6,322-crore PLI scheme to boost the production of speciality steel in India. There has been no proposal from any foreign entity under the PLI scheme.

JSW Steel signs an MoU with SMS to cut carbon emissions; invest Rs.10,000 crore



JSW Steel on 13 September announced its collaboration with German-based engineering and technology company SMS group to cut down carbon emissions at its plants. For this, JSW Steel will invest

around \$1.26 billion or ₹10,000 crores. With this venture, JSW Steel also aims to targets to bring down GHG emissions by 42 per cent to <1.95 tonnes of CO2 per tonne of crude steel (tcs) by 2030.

The flagship company of the \$22 billion JSW Group signed a Memorandum of Understanding (MoU) with SMS group GmbH in Mumbai for exploring solutions for implementation of the decarbonisation projects across various JSW Steel plants in India, it said in a stock regulatory filing. JSW Steel will focus on replacing thermal power with renewable power, higher usage of steel scrap in its operations, and increasing the beneficiation of low and medium-grade iron ore, it added.

The Indian firm aims that the collaboration will enable it reduce carbon emissions and produce green steel in one of the hard-to-abate sectors. Under the MoU, the SMS group will provide its technology experts design, engineering consultancy and commissioning for executing various projects.

While, JSW Steel will make available at its plants all the support to SMS group like raw materials, consumables and manpower for exploring solutions for implementation of general decarbonisation projects, it added.

Tata Steel sees high growth in new material business, to set up new arm

The NMB division envisions to partially insulate the vulnerability of revenues from the cyclicity of the steel business while responding to the growing demands for alternative materials.

Tata Steel will hive off its new material business (NMB) into a separate subsidiary, with a plan to foray into manufacturing railway coaches, medical material devices and graphene applications, Debashish Bhattacharjee, vice president, technology and NMB, Tata Steel, said.

While the railway coach making would involve composite material, the medical material devices would involve advance ceramics, which the NMB has developed, he said.

The objective of the new material business is to contain



News Update

CO2 emissions. EVs, aviation and transport – particularly metro rail and hyperloop – have become the key drivers of the business.

The company has formed a JV with Dutch firm TABB Interior Systems to set up a 100% export-oriented composite material railway coach plant near Pune with the NMB division, targeting Rs 700-800 crore business from its first phase of investment by 2026. "By 2030 when the second phase of investment completes, our NMB revenues will run into several thousand crores," Bhattacharjee said.

Nippon Steel plans to almost double Indian unit's output capacity



Nippon Steel Corp, the biggest steelmaker from Japan plans to almost double crude steel output capacity at its India's Hazira plant to secure more of the growing market, an executive said. The expansion plan comes despite a growing concern about a

slowdown in the global economy amid rising interest rates and weaker demand in top buyer China.

"We are accelerating investment in India," Takahiro Mori, executive vice president at Nippon Steel, told Reuters on Tuesday. "In terms of steel, India is regarded as the only market that will grow significantly."

In 2019, Nippon Steel and ArcelorMittal jointly bought India's bankrupt Essar Steel, now called AM/NS India, and have been considering expanding the venture.

Annual output capacity at the Hazira plant in western India would increase to between 14 million and 15 million tonnes from about 8 million tonnes by building new blast furnaces, he said, without giving a value for the new investment or other details.

"Our main purpose is to grab growing local demand," he said, adding that Nippon Steel would consider further expanding Hazira and building a new steelmill in eastern India.

AM/NS India said last week it would buy some infrastructure assets from Essar Group for \$2.4 billion to strengthen its steel business.

"The acquisition will give higher flexibility for AM/NS to expand operations," Mori said.

Steelmakers face an uncertain outlook, with volatile prices for coking coal, iron ore and other raw material caused by

the Ukraine crisis and with China's weak steel output.

Coking coal now unusually trades at a steep discount to thermal coal, used mainly in electricity generation, which is booming because of disruptions to Russian energy supplies.

Nippon Steel was using some coking coal as an alternative to thermal coal to a limited extent as only coking coal of a particular quality could be used for this purpose, Mori said.

In August, Nippon Steel forecast a 6% drop in annual net profit, a smaller fall than analysts expected, saying it could pass on higher prices despite lower output.

Nippon Steel, now in final talks with automakers and other major customers, wanted to hike sales prices by at least 40,000 yen (\$287) a tonne for the October-March period, compared with April-September, Mori said.

"We have borne the impact of higher material costs and the lower yen," Mori said. "We are determined not to give in to passing on the higher costs to product prices."

China's property sector support buoys iron ore prices



Iron ore futures rose on 16th September after Dalian benchmark hitting its highest in more than two weeks, buoyed by China's intensified efforts to support the ailing domestic property sector.

Hopes that top steel producer China would ease its COVID-19 restrictions also boosted sentiment. Chengdu city said it would lift a full lockdown on Thursday in all districts still facing strict movement curbs with a recent outbreak now under control.

The most-traded January iron ore on China's Dalian Commodity Exchange DCIOcv1 ended daytime trade 0.7% higher at 722.50 yuan (\$103.66) a tonne, after touching its highest since Aug. 29 at 736 yuan earlier in the session.

On the Singapore Exchange, the steelmaking ingredient's benchmark October contract SZZFV2 was up 0.5% at \$101.30 a tonne, as of 0700 GMT. China's zero-COVID policy and a downturn in the property industry have slowed down the world's second-largest economy, with



new home prices depressed by soft demand as widespread lockdowns dented already weak buyer confidence.

Guangzhou city has allowed property developers to reduce sale prices of homes by as much as 20% compared with 6% previously, financial news outlet Yicai reported.

"China has been stepping up its efforts to support the housing sector, with more Chinese cities announcing credit support and subsidies for home purchases," ING commodities strategists said in a note.

Progress towards a resolution is being made, said Westpac senior economist Elliot Clarke, citing a proposed rescue fund for distressed developers announced in July.

"Along with other initiatives surely in the pipeline, these actions have the capacity to return liquidity and proper functioning to the construction sector and to rebuild confidence," he said. Dalian coking coal DJMcv1 and coke DCJcv1 advanced 3.6% and 3.1%, respectively.

Chinese steel futures, however, reversed early gains with rebar SRBcv1 and hot-rolled coil SHHCcv1 down 0.4% and 0.6%, respectively. Stainless steel SHSScv1 slipped 0.2%.

RINL calls bids for operating its forged wheel plant in UP

RINL calls bids for operating its forged wheel plant in UP. Vizag steel producer has set Oct 13 as deadline; bidders should have experience in operation of heat treatment, machining, testing facilities and maintenance. Rashtriya Iron and Steel Corporation Limited, the corporate entity of Visakhapatnam Steel Plant (VSP), has sought proposals from interested bidders for operation of heat treatment, machining, testing facilities and maintenance of forged wheel plant set up at Lal Ganj near Rae Bareilly in Uttar Pradesh. The plant, which rolled out products sometime ago after an investment of around Rs 2,000 crore by the cash-starved Visakhapatnam-headquartered, was sanctioned during the Congress-led UPA government. Rae Bareilly is represented by Congress leader Sonia Gandhi who retained the Nehru-Gandhi family stronghold in 2019 general elections by a huge margin.

RINL has set October 13 as the deadline for submission of bids. The bids will be opened the next day. It has set up a forged wheel plant at Lal Ganj, Rae Bareilly, UP with a capacity of 1 lakh forged rail wheels per year with a provision to expand the capacity up to 2 lakh wheels per year. RINL has an off-take agreement with Indian railways to supply different kinds of wheels every year.

"The investment of such a huge amount in a distant land itself due to political compulsions is wastage of money for RINL. Instead, RINL which has a huge land bank, could have established the plant on the compound of VSP itself

in Visakhapatnam," Padi Trinadha Rao, general secretary of first registered and recognised union of VSP, told Bizz Buzz on Thursday. Also Read - AP being pushed into deep crisis, say TDP MLAs Forged wheel plant of RINL is a highly sophisticated and automated plant; input material for wheel making is CCR (continuous cast round) which are transported from main plant-Visakhapatnam Steel Plant. Two numbers of vertical working cold circular sawing machines are provided for cutting of input material CCR. Saw machine is carbide tipped saw blades as well as blades with exchangeable tips with Saw blade diameter of 1350-1560 mm. The machine can cut a round of diameter 350-500 mm. Work piece is clamped hydraulically at the in-feed and out-feed side. The plant is also equipped with a wheel rolling/ extrusion device operating on oil-hydraulically without mandrel.

TERI signs MoU with Tata Steel Foundation to implement Green Steel Project

Tata Steel Foundation and The Energy and Resources Institute (TERI) signed a Memorandum of Understanding (MoU) on Tuesday in New Delhi to collaborate on implementing the latest stage of The Green School



Project which aims to create awareness about environment conservation in the school network.

TSF and TERI will collaborate on The Green School Project – Phase V which aims to educate and empower young minds in the age group of 12-14 years on water, energy, forest and biodiversity, and waste management (interlinking with climate change) to undertake awareness and action projects at school and community levels to develop solutions enabling the creation of a sustainable environment. The Green School Project was launched in 2017 by TSF and TERI to work towards creating awareness about environment conservation in schools through curriculum linkages, action projects, and capacity-building activities.

Signing the MoU, Dr Vibha Dhawan, Director General, TERI, highlighted the importance of models such as The Green School project in creating awareness of sustainability at the grassroots. "The project has been a pioneer in



News Update

generating ecological education at the local community level," Dr Dhawan added. She also said the Green School project is in perfect alignment with the new PM SHRI scheme 2022 which has been approved in Union Cabinet recently.

Mr. Chanakya Chaudhary, Director, Tata Steel Foundation, said: "This is one of our flagship collaboration where the project works on an issue which has never been more relevant than today, and continue being as inclusive. It will be vital towards the course of this project to revisit our plans and ensure we stay aligned to our goals. We are enroute to making change agents among children in our communities and this is a change for the better that this project is attempting to bring about."

Mr. Sourav Roy, Chief Executive Officer, Tata Steel Foundation, said: "As a ground-breaking collaboration for students, we are looking at three broad directions to ensure that this emerges as one-of-its-kind programmes in the years to come: an organic expansion of the project to reach more schools in some of the most remotest and vulnerable parts of the country in terms of vulnerability, try and establish this as a model with TERI which can be replicated and look at this opportunity to create a knowledge platform which addresses pedagogical gap in education."

Mr. S Vijay Kumar, Distinguished Fellow, TERI, said: "This has an enormous significance in the long run as it is looking at an issue at the outset and looking at children to imbibe practices which are effective in the long-term."

As part of the Phase V of The Green School Project, a distinct pedagogy will be designed, tested and replicated through project interventions for different categories of schools. In this phase, students will also be motivated to volunteer for students' social responsibility by promoting their engagement with schools in the neighbourhood and beyond.

National CSR Award for JSPL in Two Categories

Jindal Steel & Power (JSP) has been selected for the prestigious National CSR Award 2020 in two categories by the Ministry of Corporate Affairs. As per an announcement recently by the Ministry of Corporate Affairs, Jindal Steel & Power, led by Naveen Jindal, has been declared as the winner in the category of 'CSR in Aspirational Districts / Difficult Terrains' (Eastern India) and 'Contribution in National Priority Areas' (Support to differently-abled).

JSP has been selected for this coveted award after a rigorous three-stage selection process initiated by the Ministry based on its prescribed systems of nominations by various Ministries, State Govt, three eminent Professional Institutes in India and Industry & Trade Chambers followed by Field verification and Grand Jury



evaluation.

Chairman, JSP, Naveen Jindal said, "We at JSP pursue Industry led inclusive development of our Nation partnering with the People and caring for the Planet. We have been

implementing multidimensional social development programmes under our CSR to improve the Quality of Life of the Community sustainably in the geography of our operational locations and beyond.

The National CSR Award by the Ministry of Corporate Affairs to JSP under two categories is indeed a recognition of our philosophy of Passion for People. For us, it is always People First".

Shallu Jindal, Chairperson of JSP Foundation said, "We are humbled and encouraged that the Government of India has awarded us the highest recognition for our CSR programmes. As we emerge from the pandemic world, we are more aware of the crisis and needs that we are facing at various levels, in health, education, society and climate. All our Programmes are completely aligned with the UN Sustainable Development Goals and aim to develop a more equitable and developed balance for the people in this country. This award will continue to motivate us to accelerate our efforts in implementing sustainable and inclusive development programmes across India."

WADI, one of the innovative projects by JSP reviewed for the National CSR Award is an Agro Horti Silviculture-based project implemented on 500 acres of hilly land benefiting the tribal populace of Chhattisgarh's Tamnar block in Raigarh district.

Under JSP Foundation's Project Sneha, JSP has significantly contributed to major reduction of malnutrition in more than 1200 Children in Pallahara block in Angul district of Odisha. Both these interventions were reviewed in the multilayer selection process for the National CSR Award in the category of 'CSR in Aspirational Districts / Difficult Terrains' (Eastern India) apart from the Project Vastalya to control IMR and MMR and other projects of women empowerment in the tribal predominant region of Tamnar.

Similarly the JSP's flagship programme 'Asha the Hope' was reviewed for the award in the category of 'Contribution in National Priority Areas' (Support to differently-abled). Through this project, implemented under the umbrella support of JSP Foundation, the company works for the rehabilitation and empowerment of differently abled, particularly people in the formative age group.

Through its CSR arm JSP Foundation, JSP has been implementing multi-faceted sustainable social development initiatives around its operational areas in Odisha, Chhattisgarh and Jharkhand as well as across India with a focus on consistent Improvement of the Human Development Index and associated socio-economic development measures in rural and tribal areas.



JSW Steel to support Odisha's Kalinganagar Park

The Kalinganagar Park, which had been messy for over two decades, has got a major facelift, thanks to JSW Steel.

Odisha Minister of Rural Development, Skill Development & Technical Education Pritiranjana Gharai, who visited the park located in Kalinganagar Industrial Complex near Jakhapura in Jajpur district, thanked JSW Steel for undertaking renovation of the park and taking up various



CSR work in the area.

After laying of underground slurry pipeline, JSW Steel renovated the park with attractive lawns, entrance gate, pavers bloc footpath and benches for sitting. A statue of two-time chief minister Biju Patnaik also adorns the park.

"Guided by the vision of our chairman Sajjan Jindal, JSW Steel is committed to the betterment of the community. The proposed mega steel plant at Paradip and ongoing slurry pipeline project is dedicated to the people of Odisha," said Ashesh Padhy, Head of Odisha Projects, JSW Steel.

Among dignitaries who accompanied the minister were Jakhapura sarpanch Raja Samal, senior leader Dilip Nayak, AVP Slurry Pipeline of JSW Steel Sudeep Dey and other company officials.

In line with Tata Steel's environment and sustainability initiatives, Tata Steel gifted steel city a rainwater harvesting project at Nildih. A new rainwater harvesting pond has been created in Nildih within a short period of three months.

Why metal giants, ArcelorMittal are shutting factories amid Europe energy crisis

The world's second-largest steel producer ArcelorMittal recently announced the closure of a factory in Europe as a result of rising gas and energy prices in the region. The world's second-largest steel producer ArcelorMittal recently announced the closure of a factory in Europe as a result of rising gas and energy prices in the region. By the end of September, the company will shut down one of the two existing blast furnaces at its steelworks plant in Bremen of Germany due to outrageously high surge in energy prices, weak market demand and a negative

economic outlook. ArcelorMittal said that high energy costs and weaker demand make production uneconomic. "The exorbitant rise in energy prices is having a massive impact on the competitiveness of steel production. This is compounded by weak market demand and a negative economic outlook," it said in a statement.

ArcelorMittal is not the first company to shut a factory in Europe. The crisis started when Russia shut down a big gas pipeline indefinitely. Russia has used its control of gas supplies to exert pressure on European countries in retaliation against sanctions imposed on it amid war with Ukraine. Gazprom, the Russian state-controlled gas company, closed the Nord Stream 1 pipeline from Russia to Germany, saying it had found a leak requiring repair. Russia squeezing gas shipments to Europe has pushed energy costs in the region, crippling heavy industries that are already receiving fewer orders from manufacturers and builders which are also being hit.

ArcelorMittal expects its Europe steel production to fall 1.5 mln T in Q4

ArcelorMittal expects its steel production in Europe to fall by around 1.5 million tonnes in the fourth quarter compared with the year-earlier period as it idles capacity due to weakening demand and soaring energy prices, the company said. The world's largest steelmaker earlier this month said it would curb output in Germany, Poland and Spain, notably by halting one blast furnace in each country. Steelmaking is among energy-intensive industries grappling with mounting costs as reduced Russian gas supply upends the European market. European steel producers are also facing ailing demand, particularly in the automotive sector, as the economic climate deteriorates, as well as rising imports from outside Europe, according to ArcelorMittal.

"Overall, customer sentiment today is at a lower level than during the Covid crisis in 2020," an ArcelorMittal spokesperson for Europe said in emailed comments.

In France, the company is planning to use a furlough scheme for workers on certain in days for the rest of the year, a local spokesperson said, confirming previous comments by union officials.

Output will be cut at its Florange processing site in eastern France, while the group will use planned maintenance on one of its two remaining blast furnaces at its Dunkirk primary production plant to lower output from October, the French spokesperson said, adding all sites in the country would shift activity more towards off-peak hours for energy consumption.



Global Crude Steel Production in July 2022 down 6.5% YoY

According to the data released by World Steel Association, the crude steel output of the 64 countries included in the statistics stood at 149.3 million mt, a year-on-year decrease of 6.5% for the 64 countries reporting to the association said. Those 64 nations accounted for approximately 98 percent of the total world crude steel production in 2021.

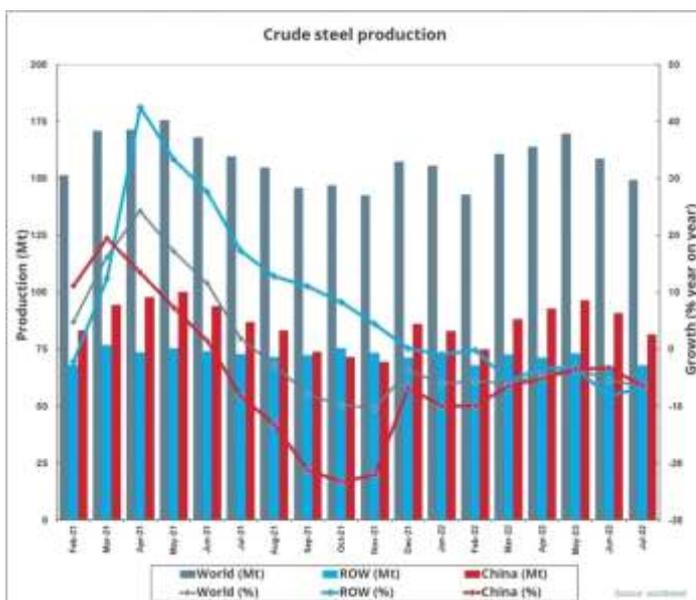
Among the world's top 10 producers, China's output fell 6.4 percent year-on-year to 81.4 million tons last year, while the country's year-to-date output amounted to 609.3 million tons, also down by 6.4 percent from a year ago.

India produced 10.1 million tons, up 3.2 percent compared with July 2021, and the seven-month production rose by 8 percent on an annual basis to 73.3 million tons.

Japan's production fell by 8.3 percent in July and declined 4.9 percent in January-July to 7.3 million tons and 53.3 million tons, respectively. Steel output in the U.S. was down 6.4 percent last month to 7 million tons, while the production in the first seven months of the year declined 3 percent to 48 million tons.

Russia is estimated to have produced 5.5 million tons of steel in July, down 13.2 percent, the association said, adding that the country's production fell 7 percent to 41.4 million tons in January-July.

The World Steel Association's monthly data shows China's crude steel output fell by 6.4 percent over a year ago and a significant 10.2 percent over June. The country produced about 55 percent of global steel output in 2022 and its decline hurts global output.



Crude steel output in July 2022 in different areas

In July 2022, crude steel production in Africa was 1.2 million mt, down 5.4% YoY; crude steel production in Asia and Oceania was 110.1 million mt, 5.2% lower than the year before; crude steel production in EU (27 countries) was 11.7 million mt, down 6.7% from the previous year, and that other European countries amounted to 3.5 million mt, a YoY decline of 16.5%; crude steel output in Middle East rose 24.2 % on the year to 3.2 million mt while that in North America fell 5.4% YoY to 9.6 million mt; Russia and other CIS countries as well as Ukraine produced 6.4 million mt of crude steel, down 29.1%; the crude steel output of South America stood at 3.6 million mt, a year-on-year decrease of 7.8%.



Table 1. Crude steel production by region

| | Jul 2022 (Mt) | % change Jul 22/21 | Jan-Jul 2022 (Mt) | % change Jan-Jul 22/21 |
|------------------------------|---------------|--------------------|-------------------|------------------------|
| Africa | 1.2 | -5.4 | 8.4 | -8.6 |
| Asia and Oceania | 110.1 | -5.2 | 812.6 | -4.8 |
| EU (27) | 11.7 | -6.7 | 86.0 | -5.6 |
| Europe, Other | 3.5 | -16.5 | 27.5 | -6.7 |
| Middle East | 3.2 | 24.2 | 25.3 | 4.4 |
| North America | 9.6 | -5.4 | 66.4 | -3.2 |
| Russia & other CIS + Ukraine | 6.4 | -29.1 | 50.5 | -18.8 |
| South America | 3.6 | -7.8 | 25.5 | -3.4 |
| Total 64 countries | 149.3 | -6.5 | 1,102.3 | -5.4 |



SIAM appoints Mr Vinod Aggarwal as its new President

The Executive Committee of Society of Indian Automobile Manufacturers (SIAM), the apex body of the Indian automotive industry, today elected Mr Vinod Aggarwal, MD & CEO, Volvo Eicher Commercial Vehicles Ltd (VECV) as its new President for 2022-23.

Mr Vinod Aggarwal, who was the Vice President of SIAM succeeds Mr Kenichi Ayukawa, Executive Vice Chairman & Whole Time Director, Maruti Suzuki India Ltd.

The election for new office bearers was conducted during the Executive Committee Meeting, which was held after SIAM's Annual General Meeting today.

After taking over as SIAM President, Mr Aggarwal



said, "The Indian automotive industry is currently at a very exciting juncture. The industry is witnessing rapid adoption and focus on connectivity, e-mobility and alternate fuels, and other technological advancements, to provide the consumers with not just modern, but also safe and environment friendly vehicles. We are grateful to the government for its constant focus on improving the infrastructure through significant investments and such policies that modernise this industry. I am humbled by the opportunity to contribute to the new era of Amrit Kaal, working closely together with the SIAM members."

The members of SIAM also elected Mr Shailesh Chandra, Managing Director, Tata Motors Passenger Vehicles Ltd and Tata Passenger Electric Mobility Ltd, as the Vice President of SIAM for 2022-23.

Mr Satyakam Arya, CEO & MD, Daimler India Commercial Vehicles was elected as the Treasurer of SIAM for 2022-23.

Society of Indian Automobile Manufacturers

Monthly Performance: August 2022

Production: The total production of Passenger Vehicles*, Three Wheelers, Two Wheelers and Quadricycle in the month of August 2022 was 2,275,407 units.

Domestic Sales:

Passenger Vehicles* sales were 281,210 units in Aug 2022.

Three-wheeler sales were 38,369 units in August 2022.

Two-wheeler sales were 1,557,429 units in August 2022.

Performance: April - August 2022

Production: Total production of Passenger Vehicles**, Three Wheelers, Two Wheelers and Quadricycle in April-August 2022 was 10,542,675 units.

Domestic Sales:

Passenger Vehicles** sales were 1,485,506 units in April-August 2022

Three-wheeler sales were 145,986 units in April-August 2022

Two-wheeler sales were 6,663,265 units in April-August 2022

* BMW, Mercedes, Tata Motors & Volvo Auto data is not available

** BMW, Mercedes & Volvo Auto data is not available, Tata Motors data is only available for Apr-Jun



Society of Indian Automobile Manufacturers

Commenting on the August 2022 sales data, **Mr Rajesh Menon, Director General, SIAM** said *“In August 2022, sales in the Passenger vehicle segment stood at 2.8 lakh units, Two-wheelers posted sales of 15.6 lakh units, while Three-wheeler segment posted sales of just 38,000 units. While good monsoon and the upcoming festive season is likely to increase demand, SIAM is keeping a close watch on the dynamic supply-side challenges. High CNG prices is a big challenge for the industry and we keenly look forward to the kind interventions and support from the Government.*

Domestic Sales: August

| Category | Domestic Sales (In Nos.) | |
|---------------------------------------|--------------------------|------------------|
| | August-21 | August-22 |
| Passenger Vehicles (PVs)* | | |
| Passenger Cars | 108,508 | 133,477 |
| Utility Vehicles (UVs) | 112,863 | 135,497 |
| Vans | 10,853 | 12,236 |
| Total Passenger Vehicles (PVs) | 232,224 | 281,210 |
| Three Wheelers | | |
| Passenger Carrier | 15,045 | 29,105 |
| Goods Carrier | 7,773 | 7,007 |
| E-Rickshaw | 746 | 2,095 |
| E-Cart | 42 | 162 |
| Total Three Wheelers | 23,606 | 38,369 |
| Two Wheelers | | |
| Scooter/ Scooterette | 460,284 | 504,146 |
| Motorcycle/Step-Throughs | 825,849 | 1,016,794 |
| Mopeds | 52,607 | 36,489 |
| Total Two Wheelers | 1,338,740 | 1,557,429 |
| Quadricycle | 3 | 64 |
| Grand Total | 1,594,573 | 1,877,072 |

* BMW, Mercedes, Tata Motors & Volvo Auto data is not available.

Domestic Sales: April-August

| Category | Domestic Sales (In Nos) | |
|---------------------------------------|-------------------------|------------------|
| | April-August-21 | April-August-22 |
| Passenger Vehicles (PVs)** | | |
| Passenger Cars | 575,779 | 688,440 |
| Utility Vehicles (UVs) | 523,012 | 737,159 |
| Vans | 44,147 | 59,907 |
| Total Passenger Vehicles (PVs) | 1,142,938 | 1,485,506 |
| Three Wheelers | | |
| Passenger Carrier | 41,118 | 102,195 |
| Goods Carrier | 23,266 | 35,020 |
| E-Rickshaw | 1,755 | 7,476 |
| E-Cart | 121 | 1,295 |
| Total Three Wheelers | 66,260 | 145,986 |
| Two Wheelers | | |
| Scooter/ Scooterettee | 1,438,270 | 2,191,208 |
| Motorcycle/Step-Throughs | 3,403,323 | 4,292,050 |
| Mopeds | 170,895 | 180,007 |
| Total Two Wheelers | 5,012,488 | 6,663,265 |
| Quadricycle | 5 | 218 |
| Grand Total | 6,221,691 | 8,294,975 |

** BMW, Mercedes & Volvo Auto data is not available, Tata Motors data is only available for Apr-Jun

| SIAM | | | | | | |
|---|------------------|------------------|------------------|------------------|----------------|----------------|
| Segment wise Comparative Production, Domestic Sales & Exports data for the month of August 2022 | | | | | | |
| Category Segment/Subsegment | Production | | Domestic Sales | | Exports | |
| | August | | August | | August | |
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 |
| Passenger Vehicles (PVs)* | | | | | | |
| Passenger Cars | 126,252 | 160,708 | 108,508 | 133,477 | 32,245 | 30,409 |
| Utility Vehicles (UVs) | 129,965 | 160,643 | 112,863 | 135,497 | 18,802 | 24,280 |
| Vans | 10,531 | 12,133 | 10,853 | 12,236 | 149 | 44 |
| Total Passenger Vehicles (PVs) | 266,748 | 333,484 | 232,224 | 281,210 | 51,196 | 54,733 |
| Three Wheelers | | | | | | |
| Passenger Carrier | 50,351 | 71,509 | 15,045 | 29,105 | 36,286 | 43,930 |
| Goods Carrier | 9,347 | 7,116 | 7,773 | 7,007 | 629 | 236 |
| E-Rickshaw | 694 | 2,233 | 746 | 2,095 | - | - |
| E-Cart | 40 | 178 | 42 | 162 | - | - |
| Total Three Wheelers | 60,432 | 81,036 | 23,606 | 38,369 | 36,915 | 44,166 |
| Two Wheelers | | | | | | |
| Scooter/ Scooterettee | 498,178 | 552,540 | 460,284 | 504,146 | 34,496 | 45,578 |
| Motorcycle/Step-Throughs | 1,111,939 | 1,270,903 | 825,849 | 1,016,794 | 336,979 | 258,048 |
| Mopeds | 57,510 | 37,314 | 52,607 | 36,489 | 858 | 66 |
| Total Two Wheelers | 1,667,627 | 1,860,757 | 1,338,740 | 1,557,429 | 372,333 | 303,692 |
| Quadricycle | 535 | 130 | 3 | 64 | 744 | 102 |
| Grand Total | 1,995,342 | 2,275,407 | 1,594,573 | 1,877,072 | 461,188 | 402,693 |
| * BMW, Mercedes, Tata Motors and Volvo Auto data is not available | | | | | | |
| Society of Indian Automobile Manufacturers (09/09/2022) | | | | | | |



| SIAM | | | | | | | |
|--|------------------|-------------------|------------------|------------------|------------------|------------------|----------------------|
| Summary Report: Cumulative Production, Domestic Sales & Exports data for the period of April-August 2022 | | | | | | | |
| | | | | | | | Report I |
| | | | | | | | (Number of Vehicles) |
| Category Segment/Subsegment | Production | | Domestic Sales | | Exports | | |
| | April-August | | April-August | | April-August | | |
| | 2021-22 | 2022-23 | 2021-22 | 2022-23 | 2021-22 | 2022-23 | |
| Passenger Vehicles (PVs)* | | | | | | | |
| Passenger Cars | 737,088 | 851,603 | 575,779 | 688,440 | 146,537 | 170,448 | |
| Utility Vehicles (UVs) | 618,476 | 843,291 | 523,012 | 737,159 | 83,321 | 98,096 | |
| Vans | 45,212 | 60,177 | 44,147 | 59,907 | 740 | 525 | |
| Total Passenger Vehicles (PVs) | 1,400,776 | 1,755,071 | 1,142,938 | 1,485,506 | 230,598 | 269,069 | |
| Three Wheelers | | | | | | | |
| Passenger Carrier | 255,082 | 275,086 | 41,118 | 102,195 | 215,338 | 177,642 | |
| Goods Carrier | 29,145 | 37,329 | 23,266 | 35,020 | 4,156 | 1,842 | |
| E-Rickshaw | 1,532 | 7,214 | 1,755 | 7,476 | - | - | |
| E-Cart | 120 | 1,300 | 121 | 1,295 | - | - | |
| Total Three Wheelers | 285,879 | 320,929 | 66,260 | 145,986 | 219,494 | 179,484 | |
| Two Wheelers | | | | | | | |
| Scooter/ Scooterette | 1,634,304 | 2,381,230 | 1,438,270 | 2,191,208 | 158,392 | 192,844 | |
| Motorcycle/Step-Throughs | 5,058,696 | 5,904,931 | 3,403,323 | 4,292,050 | 1,722,162 | 1,615,830 | |
| Mopeds | 174,248 | 179,697 | 170,895 | 180,007 | 6,152 | 1,110 | |
| Total Two Wheelers | 6,867,248 | 8,465,858 | 5,012,488 | 6,663,265 | 1,886,706 | 1,809,784 | |
| Quadricycle | 2,585 | 817 | 5 | 218 | 2,795 | 642 | |
| Grand Total | 8,556,488 | 10,542,675 | 6,221,691 | 8,294,975 | 2,339,593 | 2,258,979 | |

* BMW, Mercedes, Volvo Auto data is not available and Tata Motors data is available for Apr-June only
Society of Indian Automobile Manufacturers (09/09/2022)

| SIAM | | | | | | | | | | | | | |
|--|----------------|----------------|------------------|------------------|----------------|----------------|------------------|------------------|---------------|---------------|----------------|----------------------|--|
| Category & Company wise Summary Report for the month of August 2022 and Cumulative for April-August 2022 | | | | | | | | | | | | | |
| | | | | | | | | | | | | Report II | |
| | | | | | | | | | | | | (Number of Vehicles) | |
| Category Segment/Subsegment Manufacturer | Production | | | | Domestic Sales | | | | Exports | | | | |
| | August | | April-August | | August | | April-August | | August | | April-August | | |
| | 2021 | 2022 | 2021-22 | 2022-23 | 2021 | 2022 | 2021-22 | 2022-23 | 2021 | 2022 | 2021-22 | 2022-23 | |
| Passenger Vehicles (PVs) | | | | | | | | | | | | | |
| FCA India Automobiles Pvt Ltd | 1,661 | 1,636 | 6,544 | 8,492 | 1,173 | 1,321 | 4,192 | 6,248 | 506 | 435 | 2,699 | 1,933 | |
| Force Motors Ltd | 7 | 68 | 7 | 351 | - | 52 | - | 348 | - | - | - | 1 | |
| Ford India Private Ltd | 10,632 | NA | 39,337 | NA | 1,508 | NA | 15,818 | NA | 6,012 | NA | 18,022 | NA | |
| Honda Cars India Ltd | 12,673 | 9,935 | 39,424 | 48,512 | 11,177 | 7,769 | 33,103 | 38,449 | 2,254 | 2,356 | 5,736 | 10,993 | |
| Hyundai Motor India Ltd | 56,100 | 61,900 | 259,500 | 296,100 | 46,866 | 49,510 | 209,407 | 235,305 | 12,202 | 12,700 | 54,290 | 60,571 | |
| Isuzu Motors India Pvt Ltd | 183 | 155 | 554 | 1,440 | 73 | 45 | 293 | 250 | 1 | - | 51 | 194 | |
| Kia Motors India Pvt Ltd | 21,063 | 31,026 | 93,331 | 146,188 | 16,750 | 22,322 | 73,942 | 106,105 | 4,020 | 8,174 | 19,661 | 37,630 | |
| Mahindra & Mahindra Ltd | 16,518 | 32,047 | 88,228 | 135,115 | 15,973 | 29,852 | 80,221 | 134,215 | 943 | 717 | 3,917 | 3,495 | |
| Maruti Suzuki India Ltd | 111,368 | 156,041 | 640,443 | 790,174 | 103,187 | 134,166 | 529,981 | 646,170 | 20,268 | 21,382 | 86,327 | 110,372 | |
| MG Motor India Pvt Ltd | 2,981 | 3,933 | 15,877 | 19,885 | 4,315 | 3,823 | 15,679 | 18,355 | - | - | - | - | |
| Nissan Motor India Pvt Ltd | 6,244 | 9,858 | 32,161 | 40,290 | 3,209 | 3,283 | 15,575 | 14,706 | 889 | 5,633 | 12,710 | 21,725 | |
| PCA Motors Pvt. Ltd | 84 | 930 | 507 | 1,675 | 61 | 850 | 412 | 1,577 | - | - | - | - | |
| Renault India Pvt Ltd | 10,477 | 9,691 | 46,013 | 49,095 | 9,703 | 7,012 | 36,852 | 36,061 | 664 | 2,220 | 6,945 | 12,518 | |
| SkodaAuto India Pvt Ltd | 3,452 | 3,832 | 10,335 | 26,098 | 3,829 | 4,222 | 9,320 | 24,448 | - | - | - | - | |
| Tata Motors Ltd* | NA | NA | 70,492 | 131,375 | NA | NA | 64,961 | 131,940 | NA | NA | 345 | 222 | |
| Toyota Kirloskar Motor Pvt Ltd | 9,170 | 9,316 | 27,189 | 42,438 | 12,769 | 14,939 | 44,998 | 76,053 | 19 | - | 22 | 45 | |
| Volkswagen India Pvt Ltd | 4,135 | 3,116 | 30,834 | 17,843 | 1,631 | 2,044 | 8,184 | 15,276 | 3,418 | 1,116 | 19,873 | 9,370 | |
| Total Passenger Vehicles (PVs) | 266,748 | 333,484 | 1,400,776 | 1,755,071 | 232,224 | 281,210 | 1,142,938 | 1,485,506 | 51,196 | 54,733 | 230,598 | 269,069 | |

* Only cumulative data is available for Apr-June NA= Not Available

| SIAM | | | | | | | | | | | | | |
|--|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|----------------|----------------|------------------|----------------------|--|
| Category & Company wise Summary Report for the month of August 2022 and Cumulative for April-August 2022 | | | | | | | | | | | | | |
| | | | | | | | | | | | | Report II | |
| | | | | | | | | | | | | (Number of Vehicles) | |
| Category Segment/Subsegment Manufacturer | Production | | | | Domestic Sales | | | | Exports | | | | |
| | August | | April-August | | August | | April-August | | August | | April-August | | |
| | 2021 | 2022 | 2021-22 | 2022-23 | 2021 | 2022 | 2021-22 | 2022-23 | 2021 | 2022 | 2021-22 | 2022-23 | |
| Three Wheelers | | | | | | | | | | | | | |
| Atul Auto Ltd | 1,528 | 1,924 | 4,707 | 9,193 | 1,222 | 1,658 | 4,014 | 7,781 | 189 | 292 | 441 | 1,274 | |
| Bajaj Auto Ltd | 34,459 | 44,944 | 174,844 | 167,557 | 14,621 | 22,853 | 40,245 | 79,689 | 19,592 | 22,951 | 137,171 | 91,525 | |
| Continental Engines Pvt Ltd | 324 | 633 | 618 | 2,833 | 396 | 567 | 786 | 2,774 | - | - | - | - | |
| Force Motors Ltd | 350 | 278 | 1,355 | 1,072 | - | - | - | - | 462 | 406 | 1,400 | 1,106 | |
| Mahindra & Mahindra Ltd | 2,141 | 5,123 | 9,088 | 19,892 | 2,591 | 4,793 | 7,804 | 19,806 | - | 95 | 144 | 192 | |
| Piaggio Vehicles Pvt Ltd | 5,893 | 10,943 | 23,034 | 43,038 | 4,008 | 7,147 | 11,320 | 30,355 | 1,059 | 3,525 | 10,864 | 11,743 | |
| TVS Motor Company Ltd | 15,737 | 17,191 | 72,233 | 77,344 | 768 | 1,351 | 2,091 | 5,581 | 15,613 | 16,897 | 69,474 | 73,644 | |
| Total Three Wheelers | 60,432 | 81,036 | 285,879 | 320,929 | 23,606 | 38,369 | 66,260 | 145,986 | 36,915 | 44,166 | 219,494 | 179,484 | |
| Two Wheelers | | | | | | | | | | | | | |
| Ather Energy Pvt. Ltd | 2,107 | 6,611 | 5,874 | 19,921 | 2,117 | 6,441 | 6,269 | 19,706 | - | - | - | - | |
| Bajaj Auto Ltd | 326,322 | 343,146 | 1,515,895 | 1,519,910 | 157,971 | 233,838 | 656,755 | 712,640 | 180,339 | 121,787 | 911,429 | 805,197 | |
| Hero MotoCorp Ltd | 421,375 | 470,003 | 1,946,959 | 2,266,391 | 431,137 | 450,740 | 1,801,052 | 2,209,590 | 22,742 | 11,868 | 131,732 | 88,790 | |
| Honda Motorcycle & Scooter India Pvt Ltd | 467,918 | 470,557 | 1,392,305 | 2,002,143 | 401,480 | 423,226 | 1,233,239 | 1,821,100 | 30,114 | 39,307 | 157,008 | 182,902 | |
| India Kawasaki Motors Pvt Ltd | 97 | 196 | 1,182 | 886 | 298 | 283 | 1,229 | 1,318 | - | - | - | - | |
| India Yamaha Motor Pvt Ltd | 77,664 | 83,227 | 273,334 | 386,572 | 54,042 | 58,659 | 172,527 | 254,299 | 22,965 | 30,689 | 116,132 | 135,388 | |
| Mahindra Two Wheelers Ltd | - | - | - | 72 | 3 | 23 | 3 | 83 | - | - | - | - | |
| Okinawa Autotech Pvt. Ltd | 5,227 | 13,746 | 16,687 | 56,289 | 5,187 | 13,708 | 17,075 | 56,452 | 40 | 38 | 113 | 78 | |
| Piaggio Vehicles Pvt Ltd | 9,533 | 6,187 | 32,047 | 29,846 | 5,500 | 3,548 | 17,412 | 20,877 | 3,375 | 1,664 | 14,126 | 8,000 | |
| Royal-Enfield (Unit of Eicher Motors) | 22,103 | 73,084 | 200,310 | 344,531 | 39,070 | 62,892 | 183,037 | 267,063 | 6,790 | 7,220 | 30,501 | 45,809 | |
| Suzuki Motorcycle India Pvt Ltd | 64,231 | 83,566 | 283,974 | 362,307 | 61,809 | 64,654 | 239,264 | 293,320 | 11,654 | 14,905 | 53,974 | 74,000 | |
| Triumph Motorcycles India Pvt Ltd | 59 | 55 | 294 | 266 | 127 | 92 | 575 | 445 | - | - | - | - | |
| TVS Motor Company Ltd | 270,991 | 310,379 | 1,198,387 | 1,476,724 | 179,999 | 239,325 | 684,051 | 1,006,372 | 94,314 | 76,214 | 471,691 | 469,620 | |
| Total Two Wheelers | 1,667,627 | 1,860,757 | 6,867,248 | 8,465,858 | 1,338,740 | 1,557,429 | 5,012,488 | 6,663,265 | 372,333 | 303,692 | 1,886,706 | 1,809,784 | |
| Quadricycle | | | | | | | | | | | | | |
| Bajaj Auto Ltd | 535 | 130 | 2,585 | 817 | 3 | 64 | 5 | 218 | 744 | 102 | 2,795 | 642 | |
| Total | 535 | 130 | 2,585 | 817 | 3 | 64 | 5 | 218 | 744 | 102 | 2,795 | 642 | |
| Grand Total | 1,995,342 | 2,275,407 | 8,556,488 | 10,542,675 | 1,594,573 | 1,877,072 | 6,221,691 | 8,294,975 | 461,188 | 402,693 | 2,339,593 | 2,258,979 | |

Society of Indian Automobile Manufacturers (09/09/2022)

TOUGHEST TERRAINS DESERVE THE TOUGHEST STEEL.

BOGIBEEL BRIDGE (ASSAM)

INDIA'S FIRST AND ONLY FULLY WELDED DOUBLE DECKER BRIDGE THAT CAN WITHSTAND EARTHQUAKES OF MAGNITUDE MORE THAN 7 ON RICHTER SCALE.



PRODUCT RANGE FROM JSP



PARALLEL FLANGE
BEAMS & COLUMNS



CHANNELS AND ANGLES



PLATES AND COILS



TMT REBARS



RAILS

SPECIALITY OF PRODUCTS FROM JSP



HIGHER
STRENGTH



HIGH CORROSION
RESISTANCE



CUSTOMIZED
AND CONTROLLED
CHEMISTRY



SUPERIOR
WELDABILITY



WIDE
PRODUCT RANGE

INNOVATIVE AND SUPERLATIVE PRODUCTS FROM JSP
ARE REVOLUTIONIZING BRIDGE INFRASTRUCTURE.



ELECTROTHERM®

*"The most preferred
Steel Plant maker
up to 1 Million Ton / Annum"*



Induction Melting Furnace



Ladle Refining Furnace



Continuous Casting Machine



Rolling Mill

Toll free # 1800-257-7400

Total Solution for High Quality Steelmaking through Melting-Refining-Casting-Rolling

State-of-the-art Digital inverter technology through Fibre Optic Communication (DiFOC) system in Power Supply Units up to 40,000 KW coupled with Ultra-efficient furnace up to 80 ton capacity.

40 MW / 80 ton

ERF® (Electrotherm Refining Furnace) with ELdFOS® technology, a special metallurgical equipment for carrying out de-phosphorization and de-sulphurization in the same equipment.

10 ton to 200 ton

- Direct rolling of billets
- Enormous metal saving due to reduced scale loss
- Substantial energy saving
- Reduced material handling
- Improved yield from rolling mill
- Enhanced productivity of plant
- Environment friendly
- Higher profitability

80 mm to 400 mm

- Highly advanced and proven European Technology to maximize production, manufactured in India
- Renowned and acclaimed technical as well as OEM partners
- Wide range of supply from conventional to the most advanced equipment
- Proven competency in efficient handling of green field, brown field or revamping projects
- Higher productivity / yield
- Superior product quality

Compact Mill for Bar & Wire-Rod, Structural and Narrow Strip Mill



Engineering & Technologies

ELECTROTHERM® (INDIA) LIMITED
72, PALODIA, (VIA THALTEJ) AHMEDABAD, GUJARAT- 382 115, INDIA
Phone: + 91 2717- 660 550, Email: mkt@electrotherm.com
Website: www.electrotherment.com